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# Digital CreativeArts

issue thirteen

THE MAGAZINE FOR CREATIVE COMPUTER USERS

## PHOTOSHOP UNMASKED

### LEARN TO GIVE YOUR WORK THE PROFESSIONAL TOUCH

- Discover the secrets the experts swear by
- Try your hand at our Ultimate Retouching Guide
- Use Photoshop with 3D tools for maximum impact

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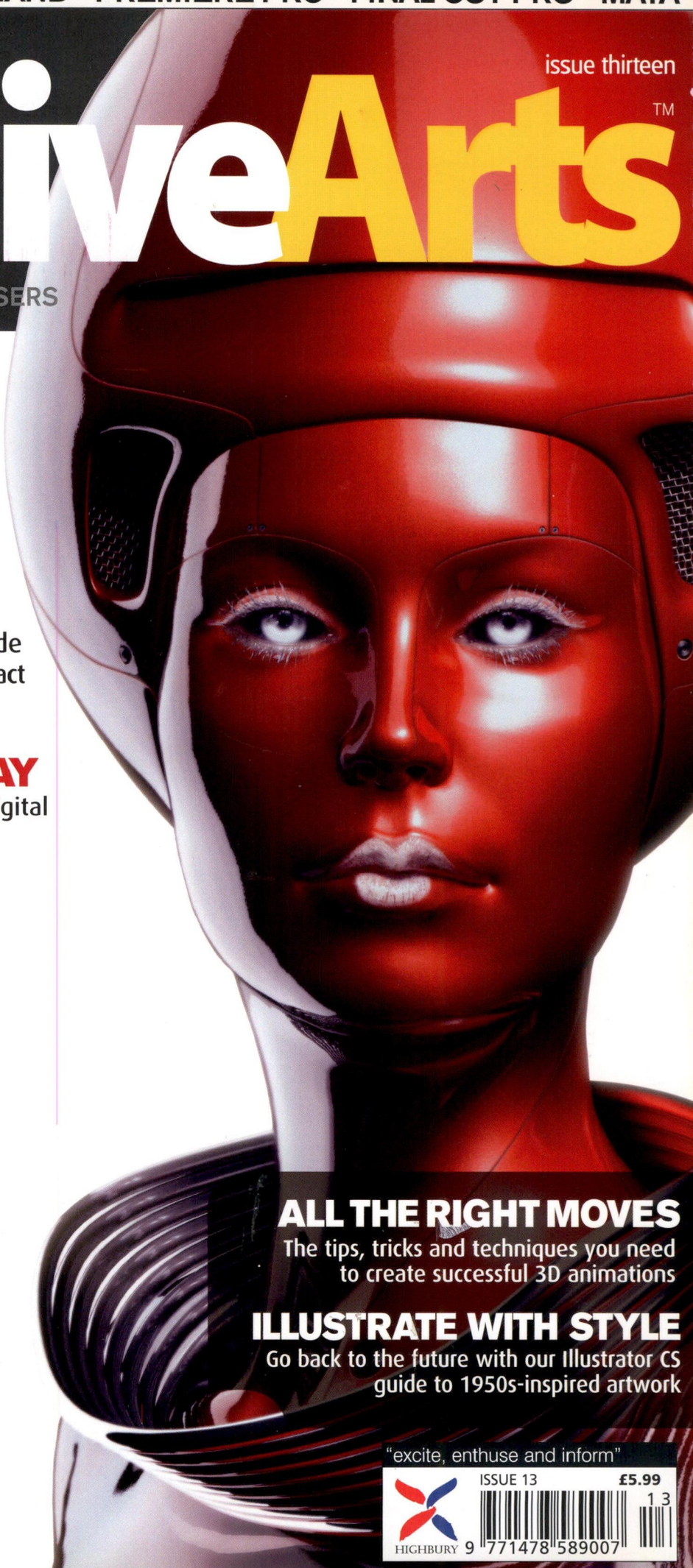

## ALL THE RIGHT MOVES

The tips, tricks and techniques you need to create successful 3D animations

## ILLUSTRATE WITH STYLE

Go back to the future with our Illustrator CS guide to 1950s-inspired artwork

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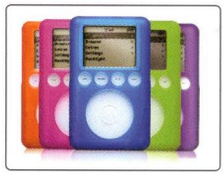

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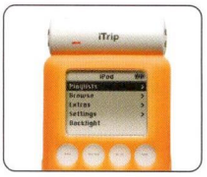


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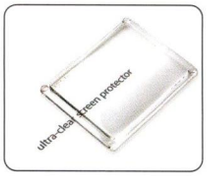


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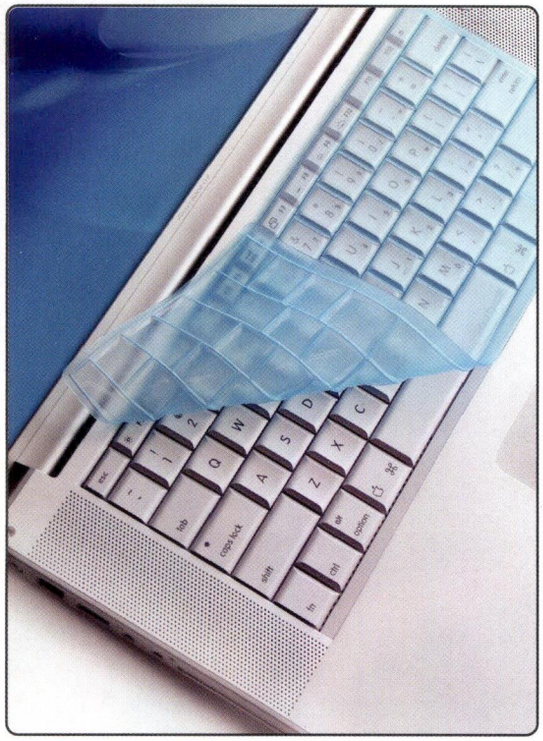

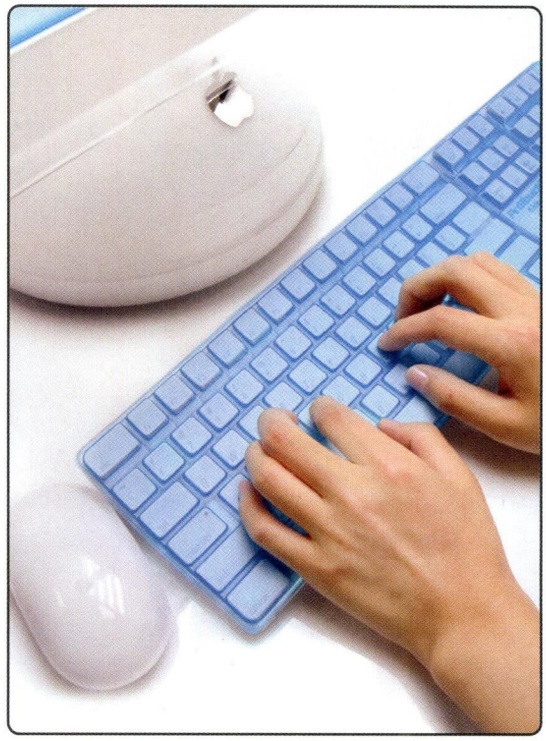

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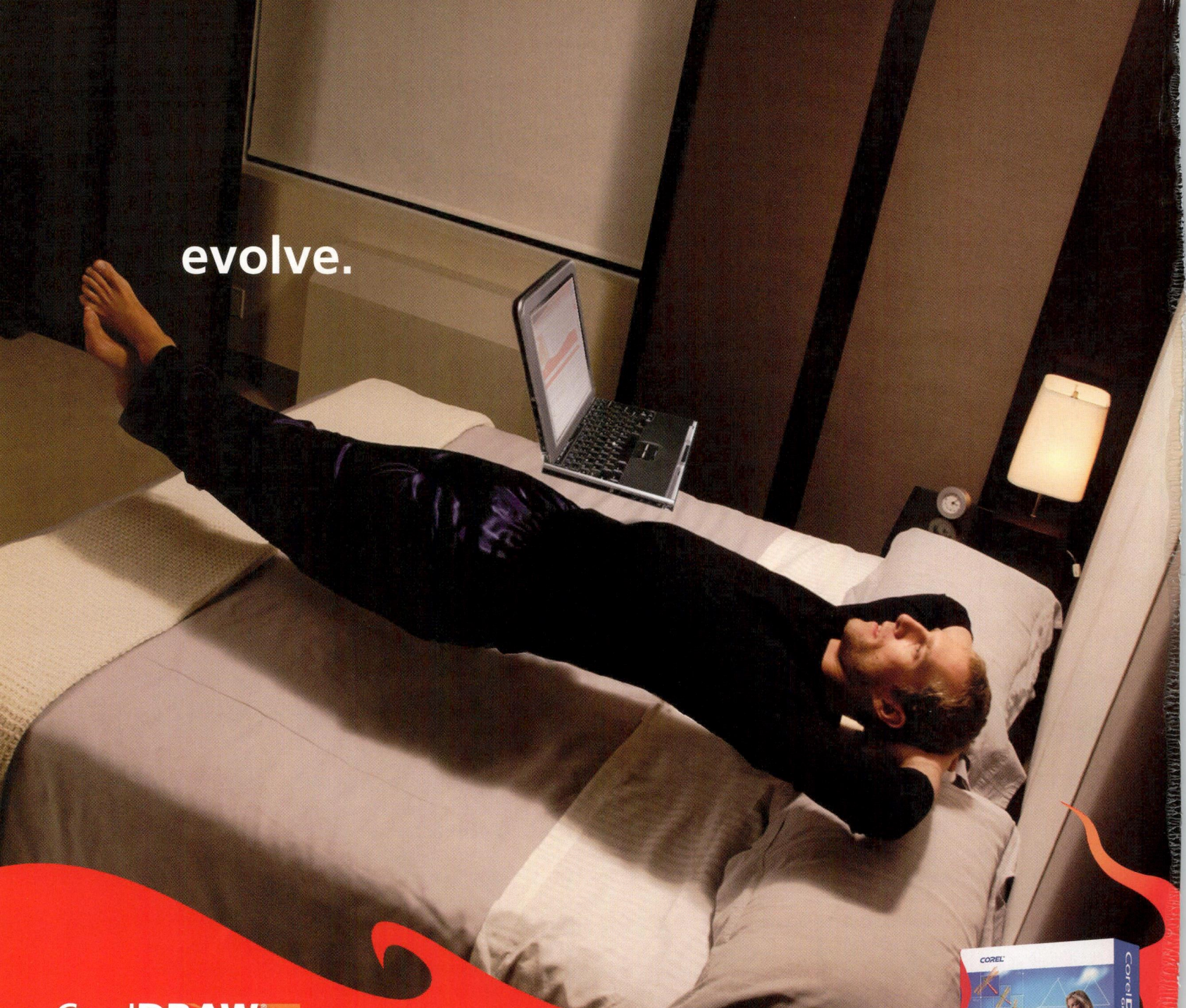


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Digital CreativeArts
Highbury Entertainment Limited,
Paragon House, St Peters Road,
Bournemouth, Dorset BH1 2JS
Tel: +44 (0) 1202 299900
Fax: +44 (0) 1202 299955
Web site: www.paragon.co.uk

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**MAGAZINE TEAM**
**Features Editor** Poz Hulls
01202 209336 **dca@digitalcreativearts.co.uk**
**Managing Editor** Dan Slingsby
**Group Art Editor** Nick Trent
**Senior Designer** Lora Sykes
**Sub Editors** Angela Kewley and Charlotte Martyn

**CONTRIBUTORS:**
Ross Andrews, Simon Danaher, Mireille Frenette, Benoit Guerville, Mark Hattersley, Mark Kendrick, Mark Shufflebottom, Andy Stewart, Mark Towse, Matt Tuffin and Lawrence Zeegen

**COVER ILLUSTRATION:**
Benedict Campbell (**www.benedict1.com**)

**WITHOUT WHOM:**
Helen Arnold and Sophie Trainor

**COVER DISC SUPPORT:**
If you have any difficulty with your free CD, please refer to the disc pages for contact information

**COVER DISC PRODUCTION**
**Digital Projects Manager** Lee Groombridge
**Multimedia Editor** Stuart Dixon

**ADVERTISING**
**Advertising Manager** Jennifer McCann
01202 200264 **jenny@paragon.co.uk**
**Advertising Sales Executive** Samantha Paterson-Crofts
01202 200233 **samantha.pc@paragon.co.uk**
**Ad Copy Controller** Lauren Deans

**PRODUCTION & DISTRIBUTION**
**Production Manager** Dave Osborne
**Bureau Manager** Chris Rees
**Scanning/Prepress** Wesley Neil
**Circulation Manager** Tim Harris
Tel: +44 (0) 1202 200200
Fax: +44 (0) 1202 200217

**INTERNATIONAL LICENSING**
*Digital Creative Arts* is available for licensing overseas. For details, please contact:
**International Manager** Cathy Blackman
Tel: +44 (0) 1202 200205
Fax: + 44 (0) 1202 200217
Email: **cathb@paragon.co.uk**

**DIRECTORS**
**Editorial Director** Damian Butt
**Production Director** Jane Hawkins
**Circulation & Marketing Director** Kevin Petley
**Advertising Director** Peter Cleall
**Art Director** Mark Kendrick
**Managing Director** Mark Simpson

Printed by **St Ives (Andover) Limited**,
West Portway, Andover, SP10 3SF
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1st Floor, 86 Newman Street, London W1P 3LD
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## HOW TO CONTACT DIGITAL CREATIVE ARTS

**General enquiries**
dca@digitalcreativearts.co.uk
01202 299900

**Subscriptions**
dca@cisubs.co.uk
+44 (0) 870 444 8682

**Advertising opportunities**
jenny@paragon.co.uk
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**CD help**
cdhelp@paragon.co.uk
01202 209339
(3-5pm, Mon-Fri only)

**Customer service**
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# Welcome

**This issue, we invite you to join plastic surgeons, two-bit starlets and footballers' wives everywhere on a quest for perfection.** While some people go to the ends of the earth to get the image they desire, all you have to do is fire up Photoshop. It's the application that unites digital artists from all disciplines, styles and temperaments and no matter how much you know, you can always know more. Whatever your brand of digital art, you can perfect it with the tricks from the Photoshop professionals that we reveal on page 20.

But if you want to join the wannabes for a bit of nip-and-tuck, then there's a non-surgical option for digital creatives and, again, it's all down to Photoshop. While *DCA* readers are no doubt a dab hand with a bit of teeth-whitening and eye-brightening, what do you do when you want to fix more? When you want to alter body shape, smooth skin and replace backgrounds, all the while retaining the character of the person photographed? Find out with our Ultimate Retouching Guide on page 30.

Elsewhere this issue you'll find expert primers for Illustrator CS, FreeHand MX and Premiere Pro, the final part of our Maya Masterclass and much more too. Don't forget to get in touch if you have any comments about the magazine, or if you want to share your artwork with us. Enjoy!

**Poz Hulls, Features Editor**
dca@digitalcreativearts.co.uk

Digital CreativeArts

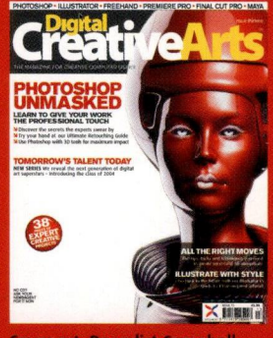
**ONLY £2.99** per issue when you subscribe see page 19

## THE DIGITAL CREATIVE ARTS PROMISE

**More advice**
With 38 pages of tutorials, *DCA* is the most comprehensive magazine for digital creatives and comes loaded with original workshops that show you how to get the most out of your software and hardware. Every file from our projects is included on the free cover CD so that you can easily follow the techniques covered. Our features are packed with hints, tricks and tips, and our news and reviews are never less than 100 per cent impartial.

**More expertise**
Every issue of *Digital Creative Arts* is loaded with advice for Photoshop, illustration, digital video, digital imaging and 3D design. We go to great lengths to search out only the very best writers and every article is written by an expert in the relevant field. This way you know that the information we publish is always trustworthy.

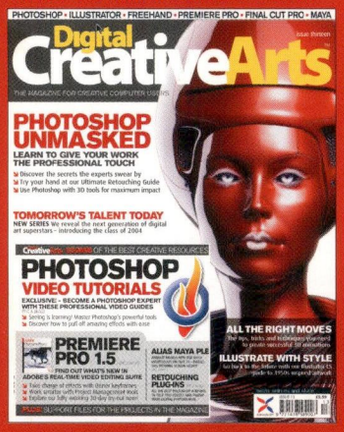
**More choice**
*Digital Creative Arts* is the only magazine to cover digital imaging, illustration, digital video and 3D design every month. Our in-depth, expert workshops and articles give you more choice for your money.




**Cover art: Benedict Campbell**
Find out more about our stunning cover on page 20, as Benedict (**www.benedict1.com**) lets *DCA* readers in on his imaging secrets. The original commission was for a glamourous part-machine woman that demonstrated what polished perfection can be achieved in Photoshop. We're impressed, and hopefully you are too!

# Find it fast...

What's on this issue's cover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ALL THE RIGHT MOVES
ILLUSTRATE WITH STYLE

20 .....Photoshop Unmasked
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## On your CD

If you want to get to grips with Photoshop, there's no better place to start than on our packed CD which comes with two excellent Photoshop video tutorials

## ↘ Essentials

**08** Newswire
Find out what's making waves in the twin worlds of technology and creativity at the moment as *DCA* runs through the headlines and keeps you up to date

**14** How Do They Do That?
Discover how the stars of the upcoming blockbuster *Alien vs. Predator* got such realistic-looking slime

**17** Feedback
A digital creative's lot is not always a happy one, so if you've got gripes to share, here's the place to do it! Perhaps another *DCA* reader can help you out

**56** Portfolio
Don't forget that we love to see what *DCA* readers are up too, and if you'd like us to dedicate four pages to your labours of love then send us a CD! That's what Selim Catkin did...

**58** University Showcase
In this new regular *DCA* feature, we explore what graduates of Bournemouth University's BA (Hons) Interactive Media Production course have created

**113** Next Issue
We shoehorn as much advice as we can in every issue of *DCA*, but if you're thirsty for more, then this is the page to see how we'll be satisfying you next issue

**114** Parting Shot
We saw this image and had to show you. Check out the work of Saiman Chow, now!

Digital CreativeArts Issue 13

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WITH ADVICE AND INSPIRATION FOR ALL THE CREATIVE APPLICATIONS, THIS ISSUE'S *DIGITAL CREATIVE ARTS* IS ANOTHER DISH OF DIGITAL DELIGHT

## 20 The professional touch

Whatever your goal and whatever your medium, Photoshop can help. While almost every digital creative uses the program, very few of them get the most out of Adobe's near-limitless app. Here we investigate how the professionals use the program – often in combination with other applications – to create the level of perfection that truly separates the men from the boys

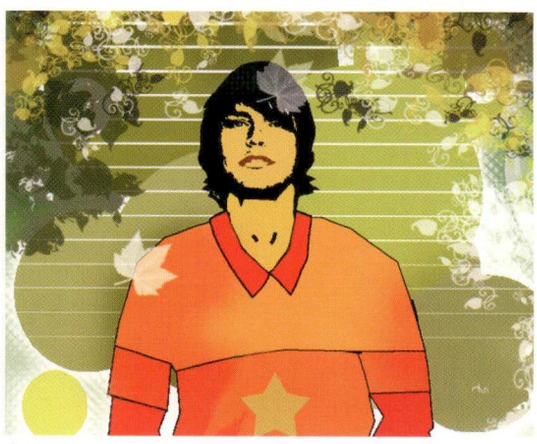
## ↘ Explore our digital art...

### 14 Inside secrets...

**It's digital, but not as we know it...**

### 54 Your artwork...

**Selim Catkin stuns us with his thoroughly modern art**



Save 55% when you subscribe! see page 19

# Hands-on advice at a glance...

## 30 The Ultimate Retouching Guide

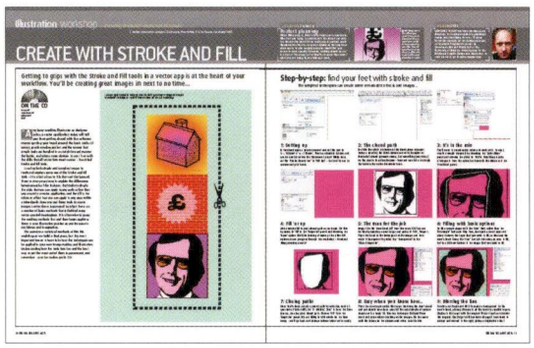
Being able to create perfect portraits out of imperfect ones is an invaluable skill for all Photoshop users. Here we take you beyond the basics of image manipulation, and reveal the tricks the professionals use to polish their people

Digital imaging workshop
THE ULTIMATE RETOUCHING GUIDE
Discover the professional techniques that will transform any decent photograph into a high-quality magazine image
Step-by-step: master the tools required for retouching

SEE PAGE 29 TO FIND OUT ABOUT MORE WORKSHOPS, WHICH INCLUDE Photoshop CS, Illustrator CS, and Premiere Pro!

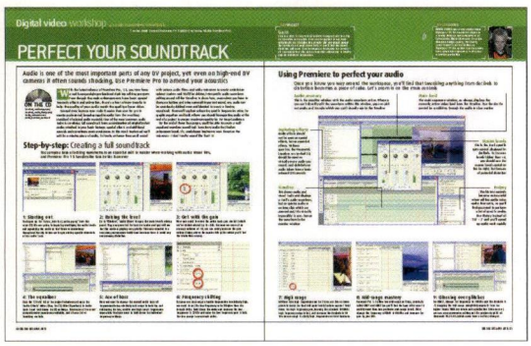
## 46 Create vector retro art

Illustration is very fresh and very now, but it doesn't have to be. If you want to hark back to a time or style past then you can, and we show you how to evoke a feeling of 1950s nostalgia in our retro tutorial. Thought you had to limit your digital doodlings to the here and now? Think again!



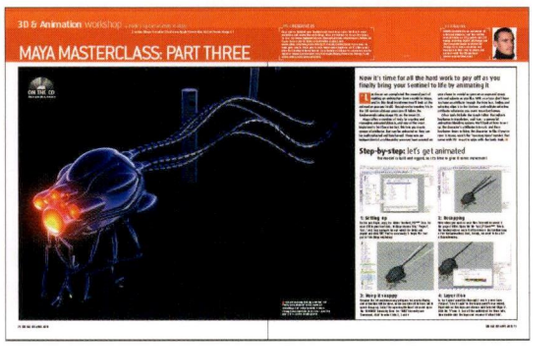

## 50 Create with Stroke and Fill

Getting the very best from software is sometimes just about knowing which tools you should be using and being able to tease out the results you want. All vector fans need to get the hang of manipulating these two essentials, so we look at Stroke and Fill in detail. Practise makes perfect...




## 60 Perfect your soundtrack

Perfect visuals mean nothing if your audio is out of sync, out of balance or simply ragged. Find out how you can sweeten your soundtrack and put the finishing touches on any movie here. You'll be amazed at the sort of seamless audio you can create from a tinny or poorly recorded track

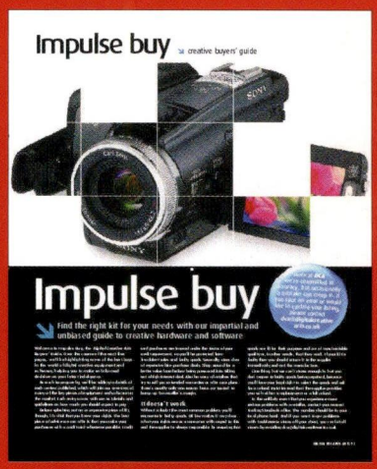



## 74 Maya Masterclass: Part Three

It's time for all that hard work and preparation to pay off as we finally bring our Sentinel to life. In this last instalment of our Maya Masterclass we look at the animation process itself and how you can make your creations move realistically using the massive power and myriad tools of Maya

# Buying advice

Over 100 creative products listed


Impulse buy
creative buyers' guide
Impulse buy
Find the right kit for your needs with our impartial and unbiased guide to creative hardware and software

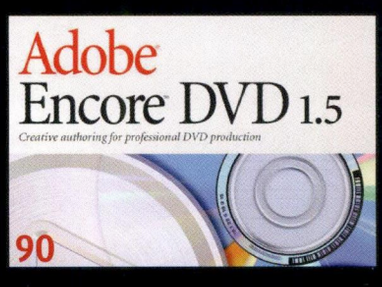
## 95 Impulse Buy

There's no denying that creative hardware and software costs a lot of money and it's vital that, whatever you spend, you spend wisely. With that aim in mind, we bring you the constantly updated *DCA* Buyers' Guide...

# Reviews

## 81 Labs

Every issue we review the latest must-have hardware and software to hit the digital creativity world. Under the microscope this issue is Encore DVD 1.5, Softimage|XSI 4 and the Kodak DX7930. If you're thinking of spending your hard-earned cash on anything from devices to software to die for, start here



# Digital CreativeArts NEWSWIRE

FIND IT FAST WITH THIS AT-A-GLANCE GUIDE TO NEWSWIRE

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Cinesite transports the Arthurian legend to icy wastelands for new blockbuster film

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Find out how the Moving Picture Company brought Hitler back to life with head-replacement technology

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Popular image editing software now comes in two flavours: Paint Shop Pro 9 and PSP Studio

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Page 12 | Canon unveils new flagship camcorder
Canon's new broadcast DV camcorder looks set to storm the prosumer market

Page 12 | Spider-Man spins his web at Alias
Maya software revealed as the primary 3D app used in the making of *Spider-Man 2*


Computer Graphics Show

# SIGGRAPH 2004

## SPECIAL REPORT FROM THE WORLD'S LARGEST DIGITAL ARTS CONFERENCE AND EXHIBITION

**The SIGGRAPH Conference and Exhibition is big. Very big.** With hundreds of exhibitors, more than 25,000 visitors and an extensive programme of panels, seminars, talks and courses covering anything and everything to do with computer graphics, the whole digital shooting match is shoe-horned into two gigantic Halls in the cavernous Los Angeles Convention Center.

SIGGRAPH 2004, the 31st International Conference and Exhibition on Computer Graphics and Interactive Techniques, was a vast melting pot of ideas, announcements and digital creativity. The Keynote speech was by Bruce Sterling, the famous science fiction writer, who speculated what might happen when there's no longer any practical difference between computer-generated models and physical, manufactured objects. In a typically outlandish address, Sterling asked what would happen to future societies, markets, industries and jobs when people had the technology to push "print" and spit out a bicycle or some other inanimate object.

■ *Sejong Park's* Birthday Boy *won 'Best Animated Short' at SIGGRAPH's Computer Animation Festival*

If Sterling's speech wasn't mind-blowing enough, the SIGGRAPH show did its level best to throw up even more surprises. Chief among these was the 3D war that's been declared between the major software publishers. With a booming market place and an ever more sophisticated user base, 3D vendors were falling over themselves to make announcements and grab market share. Maxon announced version 9 of its popular Cinema 4D 3D suite, and has added new modelling tools and more than 100 other functions. Chief among these is a Heads-Up Display (HUD) which can be configured to display information about almost any function within the editor. The new version will ship in September for both Windows and Mac.

**"3D vendors were falling over themselves to make announcements and grab market share"**

Digital Video

# TENNENTS SEES RED

## EFFECTS HOUSE BUILDS A CROWD OF 1.2 MILLION FROM JUST 100 EXTRAS

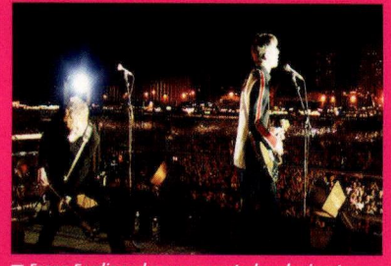
**For the new Tennents cinema ad, the 'Big Gig', Red needed to make it seem like millions were watching rock group Franz Ferdinand, rather than just the 100 extras they had to work with.** This meant the 90-second commercial needed 500 hours of post-production to be completed in five weeks, which is "a very tight schedule given our other commitments," according to the man in charge of it all, Red's Chris Mortimer.

To multiply the crowd the production team from MTP had to "film the same scene many times, with the extras in different positions each time" explains Mortimer. Each 'pass' had to be perfect, so that Red could neatly composite the elements together in Inferno. The project was shot on HD, as the format picks up a lot of detail in low light conditions. This also made compositing a more straightforward process, which was beneficial with some shots that required over 20 passes.

The final shots required a really mammoth crowd, though, and for this Red teamed up with Redvision, which used its proprietary software, Legion, to build up masses of people in 3D. Lamps were placed in the helicopter shots to allow the tracking to be done, and this was handled with Boujou bullet.

The final results pleased Red and Tennents, with Mortimer commenting, "I think you'd be hard pushed to realise that any post had been done on the ad." To find out more about Red, hop on over to **www.red.co.uk** or head to the cinema and check out the ad for yourself. ■

■ *Post production made this tiny crowd grow*



■ *Franz Ferdinand now seem to be playing to millions, not hundreds*

**HAVE YOU GOT NEWS FOR US?**

Are you making the news? Then *DCA* wants to hear about it. Email us at **dca@digitalcreativearts.co.uk** or drop us a line on **01202 209336**

## Robots need Adobe's Atmosphere

The Web site for Will Smith's movie *I, Robot* is the first film site to use Adobe Atmosphere for 3D and interactivity. Tying in with the film's futuristic look, the site allows visitors to build their own robot. "Twentieth Century Fox is the first film studio to leverage technology like this to provide a unique experience for potential movie-goers," said Adobe's Bryan Lamkin. See what Atmosphere can do at **www.irobotmovie.com**, and learn about the program at **www.adobe.co.uk**.

Not to be outdone, Discreet took the wraps off 3ds max7, the latest version of its acclaimed 3D modelling, animation and rendering software. With 280,000 registered users worldwide it's clearly one of the more popular 3D modelling and animation apps. Available this autumn, version seven integrates Discreet's powerful Character Studio tools within the main program as well as a workflow accelerator for games development and an Edit Poly Modifier designed to speed up the animation process.

Another 3D powerhouse, Alias, was busy showing off how its software was used in the production of Spider-Man 2 and Shrek 2, but found time to announce that it had snapped up Kaydara, the real-time 3D character animation and motion-editing developer. The company also released Maya 6 Personal Learning Edition, a cutdown version of Maya Complete 6 that's free for non-commercial use.

■ *With a Prixar already under his belt (see the news item in DCA 12), Chris Landreth's* Ryan *was awarded Jury Honours at the Animation Festival*

In other 3D news: Avid announced significant price cuts across its Softimage|XSI family of 3D modelling, animation and rendering suites, slashing the price of the entry level version from £1644 to just £352. And last, but by no means least, Side Effects unveiled Houdini 7, the latest version of its 3D animation and effects software, although an official release date hasn't been announced yet.

Of course, 3D software wasn't the only point of interest at this year's SIGGRAPH show, so keep your eyes open for follow-up reports in future issues of *DCA*. ■

## MONTH IN NUMBERS

**THE LATEST NEWS DISHED UP IN NUMERICAL CHUNKS**

**2 1/2 D** is how Cinesite describes the backgrounds for King Arthur

**3** is how many CCDs the new Canon XL2 offers

**7** is the latest version of 3ds max out this autumn

**8** is the number of up-and-coming London filmmakers to be funded by the PULSE scheme

**9** is the version number Paint Shop Pro has now reached

**30** inches is the size of the new Apple HD display

**1,689** is how many pounds Macromedia's new Web Publishing System will set you back

**3** minutes is all it takes to have a miniature Sistine Chapel painted onto your nails by inkjet printer

3D & Animation

# CREATING A KINGDOM

## CINESITE'S EFFECTS ENABLE KING ARTHUR TO RULE A "2-AND-A-HALF-D" KINGDOM

**Brit blockbuster *King Arthur* had more than its narrative roots in the UK, as its visual effects were handled by London post house Cinesite.** Using a mixture of its own software and established programs, it replaced lots of green-screen filming with the dramatic, icy landscapes that director Antoine Fuqua wanted.

"It was always important to me to ensure that the effects process intruded as little as possible upon Antoine's filming... and I think we certainly achieved that," explains Cinesite's Matt Johnson. "Within the given production parameters of filming within the UK and Ireland, there really was no location which would have represented the environment Antoine envisioned, so we always knew we would need to do a lot of work to create the space digitally, and accounted for that while the scenes were being filmed."

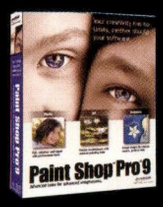
The technique Cinesite used to replace the backgrounds meant taking detailed measurements of the film's Pinewood sets and Dublin locations. Cinesite's artists created detailed digital matte paintings of the new backgrounds, which were imported as separate planes into Cinesite's proprietary software. This calculated depth and distance to create the illusion of a 3D space, and allowed them to create a 3D camera track to add movement. While they also used a fully CG environment too, the unique way they employed planes of digital mattes has led Cinesite's artists to call the results '2-and-a-half-D'. The results were also textured using Maxon's BodyPaint 3D.

■ *From a distinctly un-Arthurian setting...*

■ *...to digital Dark Age snowy wastes*

Find out more about Cinesite at **www.cinesite.com** and King Arthur at **http://kingarthur.movies.go.com**. ■

■ *Cinesite created digital matte paintings for the new backgrounds, which were composited with footage shot on location in Dublin and at Pinewood Studios*




## Paint Shop Pro splits

Instead of releasing one new version of Paint Shop Pro, software developer Jasc is launching two. The first will be Paint Shop Pro 9, a version that takes up the gauntlet of professional image editing with features like natural media tools and an impressive Symmetric Shape tool. The second release is to be Paint Shop Pro Studio, which is aimed firmly at casual and fun-oriented users. Find out more about the two versions at **http://uk.jasc.com**, where you can buy PSP9 for £99.95 and PSP Studio for £69.95.

## Mixmasters returns to ITV

Another series of the music show *Mixmasters* is heading to ITV1 this autumn, with 20 specially created videos from production company Addictive TV. Digital artists, VJs, DJs, animators and graphic designers worked on the projects and used a tremendous variety of software, including Flash, Photoshop and After Effects. Find out more about Addictive TV – which regularly releases DVD compilations of VJ-ing and audiovisual work – at **www.addictive.com**.

A PICK OF THE TOP NEW HARDWARE RELEASES FOR YOU TO BUY

# NEW STUFF

## Apple 30-inch Cinema HD Display

Perfect to show off your new copy of Final Cut Pro HD, this new Mac flatscreen comes with two Firewire ports and two USB 2.0 ports, perfect for all your peripherals. With 2560 x 1600 pixel resolution, it's a jaw-dropping king of monitors. Unfortunately, the price mirrors this, and you'll need £2,549 to get your hands on one. See **www.apple.com/uk** for more.

## CanoScan LiDE 35

Light and stylish, the latest scanner from the Canon stable is just 38mm deep, making it the perfect addition to the minimalist office. Featuring 1200 x 2400 dpi scanning and 48-bit colour depth it packs a reasonable amount of imaging power into its slender frame too. Find out more about this new flatbed at **www.canon.co.uk**. You can expect to pay around £59 if you snap one up.

Digital Imaging

# HEAD TO HEAD

## THE MOVING PICTURE COMPANY ENSURES HITLER IS ALIVE AND WELL AND LIVING IN PIXELS

**The Moving Picture Company has done some ground-breaking head-replacement work for the Discovery Channel, creating historical footage that is almost indistinguishable from the real thing.** As part of a programme called *Virtual History*, production company Tiger Aspect wanted to recreate famous moments from the lives of Second World War leaders that no cameraman had been around to capture.

The footage was shot with actors who look physically similar to famous (and infamous) figures, and plaster casts were made of their heads. A sculptor then used these to create realistic busts, which were laser-scanned to create digital copies. During the shoot the actors wore specially designed rigs that allowed MPC to track them and then add the digital replacements later.

Maya, Shake and the MPC's proprietary software were used in the process, which also involved motion-capturing the actors speaking the lines and using this data to animate the faces, as well as a long texturing process.

*The MPC footage is eerily realistic*

While not a totally new technique – *The Matrix* featured some head-replacement, for instance, as have other Hollywood blockbusters – it is the first time this has been done with historical figures, and for TV too. Find out more about the Moving Picture Company at **www.moving-picture.com** and check out *Virtual History* when it hits the Discovery Channel this autumn. ■

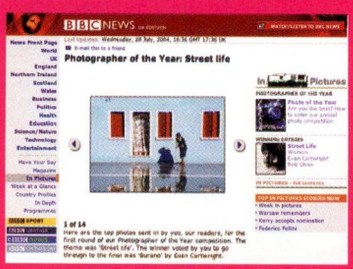
*Plaster casts and custom-built rigs helped artists map famous faces onto actors*

Photography

# BBC TO REWARD TOP PHOTOGRAPHERS

## ONLINE COMPETITION OFFERS SNAPPERS A CAREER BREAK

**The BBC has launched a new competition to encourage budding young photographers from around the UK.**




*The winner of the first assignment was Euan Cartwright with his shot 'Burano'*

The contest is based around different assignments – 'Solitude' is the theme until September 13, when there will be an online vote to decide the winner. The last assignment will be 'Heroes', which has a deadline of 30 September.

The two photos with the most votes from all the different assignments will then go through to a grand final, which will take place on 15 October and decide the BBC Photographer of the Year. The award follows previous competitions run by BBC London and the *Countryfile* program. BBC London executive editor Jane Mote said: "The judges have been consistently impressed with both the great range and high standard of entries submitted to our previous competitions."

This year's competition has a career-making prize at stake for its eventual winner: the chance to shoot a photographic story of their choice and have it displayed on BBC online.

All entrants have to do is send a JPEG to **yourpics@bbc.co.uk** along with their contact details. See **http://news.bbc.co.uk** for more information – hurry, as the deadline for the 'Solitude' section is 13 September! ■

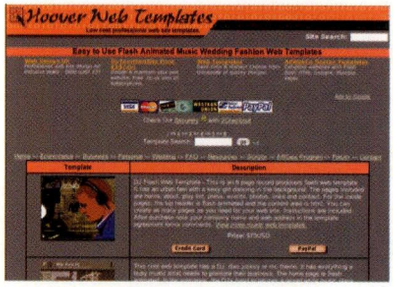
# RESOURCES

## THE BEST ONLINE DESTINATIONS FOR WEB TEMPLATES

### Template Monster

**www.templatemonster.com**

There's no shame in using Web templates – no-one's an expert in everything! Allowing you to search by author as well as category and style, this site is great if you've got a reasonable idea of what you're looking for.




### Hoover Web Design

**www.hooverwebdesign.com**

Although primarily directed at creating a bespoke site, this page has some useful templates. It's also handy for ideas and tips, and is ideal if you just want a couple of templates to boost an existing site.

### Pixelmill.net

**www.pixelmill.net**

Packed with FrontPage and HTML templates, this site offers much more and you can also browse it for tutorials and images. It's well laid out and easy to use, which is a good sign seeing as its selling Web templates.

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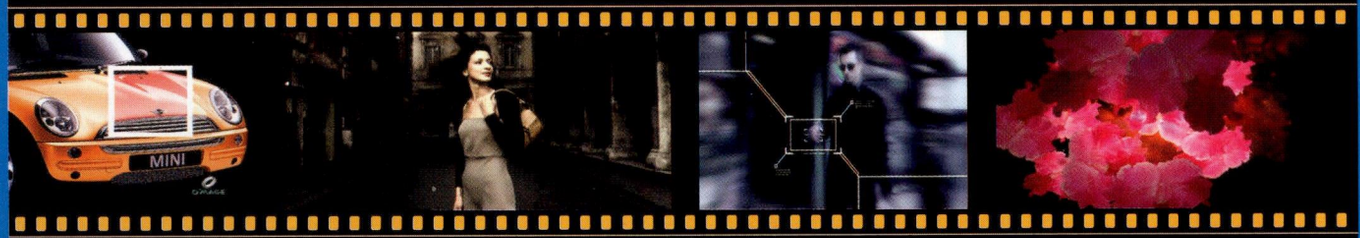


Images courtesy of:O 'MAGE LTD.;Laruccia Producoes;New Magic Communications;Solvent Dreams – Digital Post..

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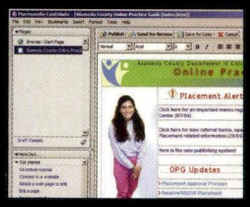
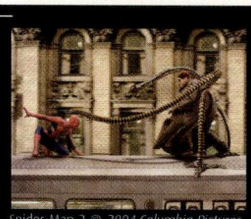


## Macromedia updates product line

Macromedia has announced its new Web publishing system, which is designed to make it easier for people to update their sites. Made up of Studio MX, the new Contribute 3 and FlashPaper, the system can be updated by as many people as you want. Contribute has new features, one of which is increased integration with Dreamweaver. Available for Mac and PC, prices begin at £1,689 for 10 licences. Visit **www.macromedia.com/uk**.



Spider-Man 2 © 2004 Columbia Pictures. Photo courtesy of Sony Pictures

## Spider-Man reveals his Alias

It's been revealed that Maya was the primary 3D app used in the making of *Spider-Man 2*. The program created Doc Ock's tentacles as well as digital doubles for fight sequences. Alias even developed a new element for the team at Imageworks to help recreate the layers and texture's of Doc Ock's costume. "Maya allows us to do things on screen that even its makers never envisioned," said Imageworks' Peter Nofz. Find out more about Maya at **www.alias.com**.

# DIGITAL ARTS DIARY

WHAT'S HAPPENING OVER THE NEXT MONTH OR SO...

**SEPT 02** Apple Expo
Catch the tail end of the Mac market's biggest party in Paris

**SEPT 02** Photoshop World Expo
Also in progress is the annual imaging orgy that takes place in Orlando

**SEPT 03** Hellboy
The latest effects-crazy comic-book adaptation hits the big screen in September

**SEPT 17** Collateral
Michael Mann's new HD-shot masterpiece arrives on UK cinema screens

**SEPT 26** Cineme
The Chicago International Animation Festival opens its doors again

**SEPT 30** New York International Film and Video Festival
Both market and festival, this part of the event takes place in LA

**OCT 01** Platforma Video_04
A film festival solely open to video formats, this is in Athens and perfect for the upcoming digital filmmaker

**OCT 01** Sky Captain And The World Of Tomorrow
Jude Law gets all-heroic with the help of blue-screen and digital matte painting

**OCT 06** Linux Expo UK
Celebrate all things open source at this year's Olympia-based event

**OCT 14** DCA 14 on sale
Get ready to run to the shops for the latest copy of your favourite magazine for digital creatives

Digital video

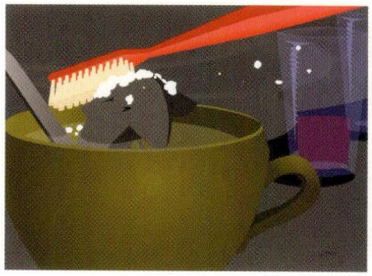
# LONDON PULSE

## EIGHT LUCKY LONDON FILMMAKERS WILL HAVE THEIR PROJECTS PRODUCED BY THE END OF THE YEAR

**Film London has announced the list of filmmakers who will receive funding for the development and production of their short films.** The PULSE scheme has £68,000 to share between the eight lucky creatives. Projects were picked on the potential of their scripts, and development of them will be a large part of the project. The conditions of the award are that the films must be no more than 10 minutes long, cost no more than £10,000 and be produced on a digital format.

"Our big job is to move London's talented filmmakers on in their careers," said Film London's Maggie Ellis, explaining that the award's recipients are "emerging talent – they might have been in the film industry but they haven't written and directed before." The projects will be ready for release in January 2005.

Three of the winners of last year's award will have their films screened at this year's Edinburgh Film Festival. Find out more at **www.filmlondon.org.uk**, and learn about 2005's scheme. ■



■ *Last year's PULSE short films will be shown at this year's Edinburgh Film Festival*

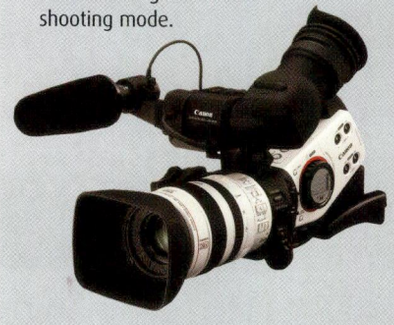
■ *Another of 2003's shorts was 'Elephant Palm Tree', written and directed by Kara Miller*

Digital Imaging

# CANON RELEASES NEW BROADCAST DV CAMCORDER

## FLAGSHIP CAMCORDER TO REPLACE MUCH-LOVED XL1S

**Raising the bar for the prosumer camcorder market, Canon is to launch the new XL2 in September.** The new camera looks similar to the XL1s, but boasts a serious boost in terms of its recording power, with features like variable frame rate recording and a 16:9 shooting mode.



"With more than double the resolution of the XL1s, the XL2 sets the new broadcast quality Mini DV recording standard," said Canon's Malcolm Hills, "Canon expects this digital video camcorder to be immediately popular with digital filmmakers, wedding and event videographers, documentary makers and broadcast station producers."

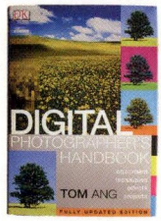
The XL2 features three 0.8 CCDs and allows users both 50i and 25p recording. The camera should also impress with a 20x optical zoom, interchangeable lens and boosted optical image stabilisation. There are also two built-in Neutral Density filters, which allow the iris to be fully opened in strong light conditions. Prices are yet to be announced, but visit **www.canon.co.uk** for more details. ■

# NEW BOOKS

## THE LATEST DIGITAL ART VOLUMES TO PROP UP YOUR BOOKSHELVES

### Digital Photographer's Handbook

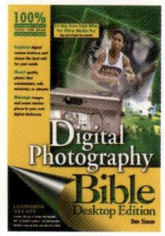
**Author:** Tom Ang
**Publishers:** Doring Kindersley
**ISBN:** 1-4053-0529-0 **Price:** £25




A fantastic guide for both the photographer and the keen Photoshop user, this packed and extremely helpful tome really shows you what's what. Never scrimping on either the technical or the creative side of photography and digital manipulation, it explains things thoroughly and thoughtfully. It also contains useful advice for turning pro!

### Digital Photography Bible

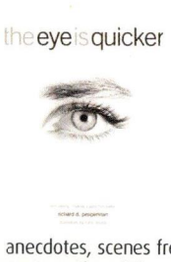
**Author:** Dan Simon
**Publishers:** Wiley
**ISBN:** 0-7645-6875-2 **Price:** £16.99




This book suffers a little from trotting through subjects in a slightly pedestrian manner, but you can't doubt the usefulness of the information it provides. More colour photos would have been nice, and more creative advice too, but the workshops should prove useful for beginners as the basics are comprehensively covered.

### The Eye Is Quicker

**Author:** Richard D. Pepperman
**Publishers:** Michael Wiese Productions
**ISBN:** 0-941188-84-1 **Price:** £19.99




If you're looking for something that explains editing theory – rather than concentrating on how to use editing programs – then this is the book for you. Filled with explanations and anecdotes, scenes from real films are used as examples of the editor's art. This is an enjoyable and informative read that offers a diverting alternative to workshops.

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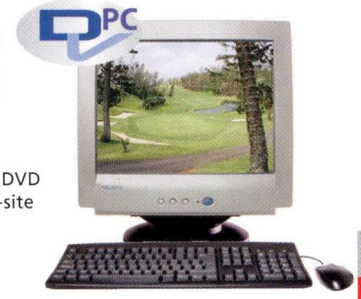

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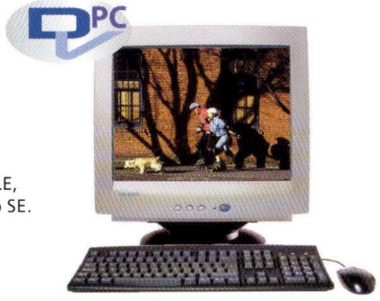

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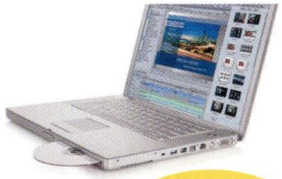

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# IN YOUR FACE

## WE FIND OUT HOW CINESITE BROUGHT THE FACE-HUGGER ALIENS TO LIFE FOR THE UPCOMING BLOCKBUSTER ALIEN VS. PREDATOR

Why have one successful franchise in a movie, when you can have two? That's the basic premise of *Alien vs. Predator*, a film that features a showdown between two iconic movie monsters and a human cast that's mere creature fodder. But don't make the mistake of thinking that this is a cash-in product; a low-rent sequel designed to extract more money from the loyal fans. In fact, *Alien vs. Predator* is something of a dream project for director Paul Anderson and the slate of digital effects houses that worked on the job. With a huge amount of physical models and 3D work to bring together, it was the ideal opportunity for effects houses – like Cinesite – to show off their creative muscle.

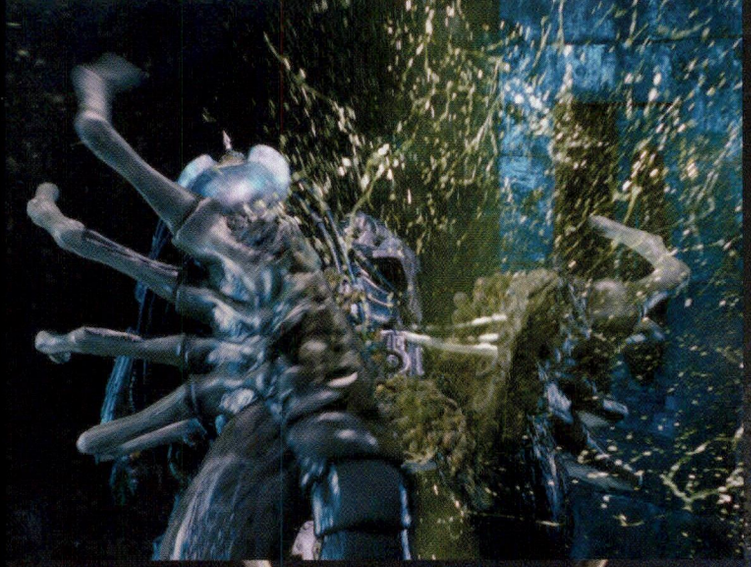
While not the only part of the film Cinesite worked on – it was also involved with shots of the approach to the whaling station the film is partly set on – the 'face-hugger' sequence was certainly the most intense. Depicting an alien attack on two humans, it is the first time the aliens are seen close-up in the film, and the entire sequence was made up of 16 shots vital to the feel of the finished product. It was a creative challenge that made the most of Cinesite's experienced 3D and 2D teams, the former led by Ivor Middleton and the latter by John Rey.

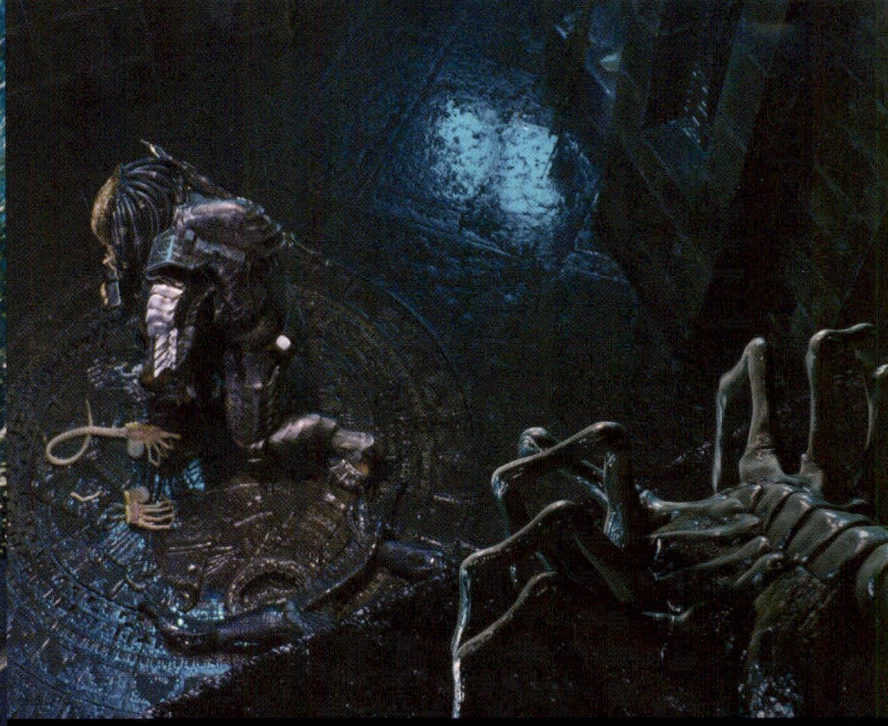
### Digital and physical models

Middleton and Rey were involved since October 2003, when the initial planning for what the creature would look like look place. The Prague-based shoot ran from November to February, with the two Cinesite supervisors flying over whenever a relevant scene was being shot. The animation began during this period, but kicked into high gear when the shoot wrapped.

Cinesite's starting point was to get hold of the physical alien model that had been created, and to get it scanned in at Framestore CFC, another London post house. The data that created was then taken into Maya, where the actual modelling and animation took place. By the time shooting finished, Middleton had a team of 12 3D animators working on the project, and he remarks that "probably the most complicated aspect of it was the texturing." The models used on set were covered in 'superslime' and it was this substance that had to give the creature its organic look.

As Middleton continues, "We had to match that with Renderman shaders and build in the slime look. What you end up with is two surfaces – the skin and the slime layers – all of which has to match across all the cuts in the edit." Cinestite had to give its CG creature an enormous amount of detail, as many of the shots in





**"The creatures were such a success that they wanted to see even more of them"** Ivor Middleton

the sequences are slow motion, to really show off the creature in all its gory glory.

## Victims of success

Something that made the whole process even tougher was that the edit of the sequence Cinesite had to work with was constantly changing, and in fact their work was so admired that the film was re-cut to take this into account. "The creatures were such a success that they wanted to see even more of them, so we had to create new shots," explains Middleton.

Once the 3D team had worked their magic, shots could be passed to Rey and his 2D compositing crew. As with the animators, a 'set-up' team had been in place since the shoot, but once animation was really in progress there were also 10 people making sure that the animation sat realistically in the frames. They also had to add more layers of 2D animation, such as explosions, debris and more slime. Cooperation between the two teams was critical, as was the back-and-forth with the rest of the production. Fortunately, as Middleton points out, "We had plenty of interaction with Paul. He would come round once a week to steer the project." With the editing taking place in London too, the project pulled together efficiently, with all parties pleased with the standard of work. "During the last five years – ever since *Gladiator* – there's been a massive amount of work coming into London," explains Middleton. For the Hollywood studios financing their projects, the results seem to be worth it.

Find out what else Cinesite has been involved in recently at **www.cinesite.com** and start getting excited about *Alien vs. Predator* at **www.avp-movie.com**, as the movie opens on 22 October. ■

■ *[opposite left] One of the victims discovers that a moving target is always the hardest to hit – especially when it's this slimy!*

■ *[Top left] Middleton explains that the texture of the 'superslime' on the aliens was one of the hardest effects to match*

■ *[Top right] The aliens make light work of dispatching their co-stars. The modelling and animation was completed in Maya*

■ *[Bottom left] The incredibly realistic detail of the aliens was a tremendous success, resulting in a re-cut of the film*

■ *[Bottom right] No, not the Cinesite team at work, but another scene from the movie. Are they admiring the superslime effects...?*

# There's only one thing more fun than watching movies and playing video games. Making them.

© Hasbro. 2004 'Soundwave'
Image appears courtesy of Charlie Bayliss,
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# FEEDBACK

HERE'S YOUR CHANCE TO TELL US WHAT YOU LIKE AND DISLIKE ABOUT THE MAGAZINE, INFORM US AND OTHER READERS ABOUT YOUR WORK AND GET YOUR TROUBLES OFF YOUR CHEST. GO ON – WE'RE ALL EARS...

## HOW TO CONTACT FEEDBACK:

**Email:** dca@digitalcreativearts.co.uk
**Snail:** *Digital Creative Arts*,
Highbury Entertainment Ltd,
Paragon House,
St Peters Road,
Bournemouth,
Dorset BH1 2JS

## SHORTS...

### SUBJECT: SEEING DOUBLE
### FROM: AUNG KYAW MYINT

You know the TV series *24*, which was shown on BBC 2? It had two stories happening at the same time and also shown at the same time on screen. Could you explain to me how I can use Premiere Pro to create that particular effect?

*By a massive coincidence, the picture-in-picture effect that* 24 *uses to such dramatic effect is actually the subject on the editing workshop on page 64. Unfortunately it is for users of Final Cut Pro, but the techniques discussed work in a similar way in other editing packages, like Premiere Pro. All you need to do is use layers. Place the two stories on different layers, then resize the clips so they both fit in the frame. You can then animate them so they move, grow, shrink, transform and so on.*

### SUBJECT: FILE PROBLEMS
### FROM: DAVID J. LOVEDAY

I purchased a copy of issue 10 specifically for the Adobe Illustrator CS trial version and the cityscape cover image that can be created using the tutorial. On the CD, there are two versions of the image. After I installed Illustrator CS, and tried to open the images, neither would function. I would like to know: how I can get decent working copies of these images?

*A few people have had this problem David, but there is a solution. Get in touch with the address on the CD pages,* ***cdhelp@digitalcreativearts.co.uk****, and they'll sort it out for you.*

### SUBJECT: LOTS OF NEW SUBSCRIBERS
### FROM: PAUL MORRIS

I've read good reports about *DCA* and would like to subscribe. I'm also interested in acquiring the *Digital Creative Arts Special Edition* about Adobe Premiere. How do I go about this? I'm in Belfast.

*We're delighted you've heard good things. Subscribing is easy – you'll find all the information you need on page 19. For anyone else who wants to subscribe to the magazine from outside mainland UK, the number is +44870 444 8682.*

We reserve the right to edit the letters that we publish. Please state clearly if you do not wish your name to be published. Sadly, we cannot respond to every letter received.

### SUBJECT: WEB WORRIES
### FROM: DANNY GLANFIELD

Maybe I've just seen *Spider-Man 2* too many times, but I think I'm about to venture into some Web slinging. I've been a digital artist for quite a few years now, but up until now it's been purely for fun. Recently though, people have started asking if they can get prints of my pieces and I figure I might actually be able to make some money out of it.

At the moment the people that are interested are my friends, so it's fine that they come round and look at my computer and pick the ones they like while I stand around in my pyjamas eating cereal. But if I want strangers to look at my work too, then I guess some sort of online portfolio is in order. Do you have any advice?

I've browsed a few Internet magazines in my newsagent's but I'm too scared to buy because they're filled with terminology my poor little Photoshop-loving brain doesn't understand. Do you think creating a portfolio is worthwhile?

■ *Find out what's what in the world of Web design at* ***www.total-web-design.com***

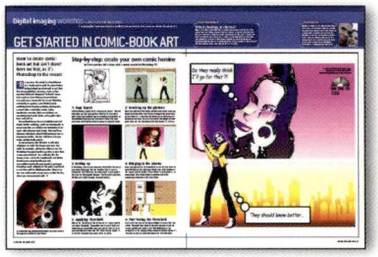
*We certainly do, as we're big believers in getting your art out there. You might be interested to learn that* DCA*'s sister magazines* Web Designer *and* Practical Web Projects *have launched a new Web site, which you can find at* ***www.total-web-design.com****. As well as introducing you to all the software and techniques involved in creating a site, it's also a great place to chat to other digital creatives. So if you really don't want to get bogged down in PHP yourself, perhaps you could get talking and make a trade. They could help you design a Web site (or even do it for you) and you could provide them with some breath-taking and original works of digital art.*

### SUBJECT: COMIC BOOK CRAZY
### FROM: JAY HERALD

I always read *Digital Creative Arts*, but I loved it more than normal last issue when I saw the comic book art workshop you had done! I've been dreaming up characters and a story for a while now, and it is my ultimate goal to turn it into a fully fledged comic! I read them all the time, and I'm amazed at how the artists can carve and keep their own unique styles. I really like Manga stuff, but my all-time favourite is *Judge Dredd*.

I tried out the workshop immediately, and though my style is going to be a lot darker – less colours, more texture and lots of work on shadows and perspective – I really learned a lot. I liked the fact that you could do it from ordinary photos too, although I plan to start from sketches. Can you get more comic book stuff in the magazine please? I'd love to see it!

*Thanks for the kind words Jay. Would other readers like to see more workshops on comic book art? It's a rich area of digital art, and there are plenty of different styles and techniques to explore. The idea of last issue's workshop was to ease people in gently, and to show that you don't have to be a dab hand with a pencil to be able to create comic characters. Let us know what you think, and if there are any styles you'd like to find out more about.*




■ ***Creating your own comic art isn't as complex as it seems – it can be incredibly rewarding!***

## LETTER OF THE MONTH

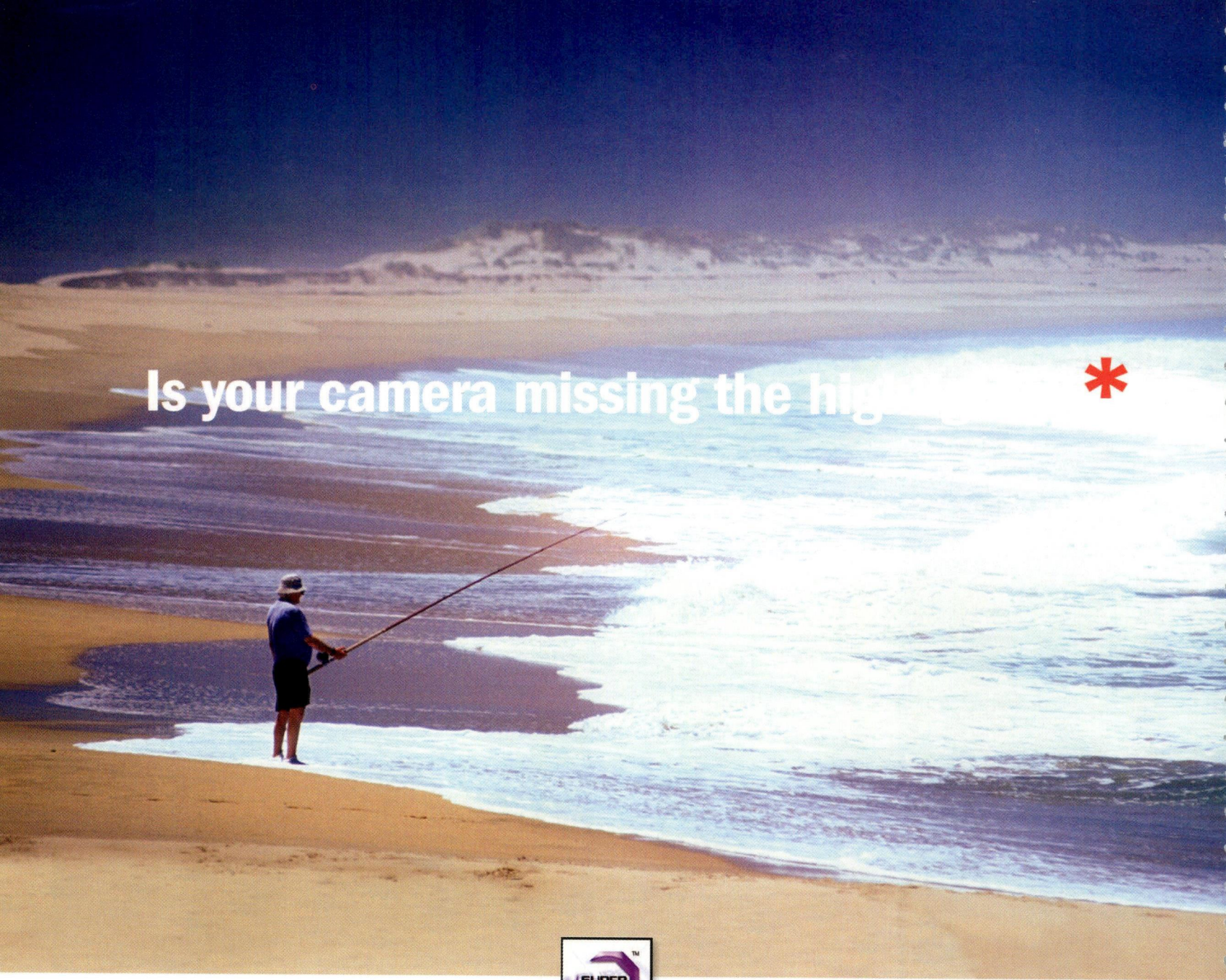
**LETTER OF THE MONTH** wins a year's subscription to Digital Creative Arts. Write in now for a chance to win!

### SUBJECT: REACH FOR THE SKY
### FROM: BOB HARRINGTON

I studied art (long before it was digital) at college, but I chose not to try making a career of it, instead going into the retail industry. Recently, with a bit more time on my hands, I decided to get out my dusty old paintbrushes. I've been experimenting and am now familiar with Photoshop and Painter. It was my interest in the latter that drew me to issue 12 of the magazine, which was the first one I'd seen. The cover really got my attention! As well as that workshop, I also really enjoyed the 'Achieve Illustration Excellence' article. Although it's a bit late to give up the day job, I shall be striving to polish my Photoshop work. Who knows, if I continue enjoying it as much as I am at the moment, I may well send you some entries for your Portfolio section!

*We're glad you enjoyed the issue, Bob, and that both the Painter workshop and the illustration feature were inspirational for you. We've had loads of feedback about how striking Hannah Gal's Painter woman on the cover of issue 12 was, and we're really pleased it made an impression.*

■ ***Last issue's feature revealed hot tips from some of the world's best illustrators***




Is your digital camera missing the **highlights?** If it's not one of the cameras below, the chances are, it is. Capturing highlights is critical to image quality, yet conventional digital cameras struggle to record the detail in areas such as sky, skintones and flash exposures. Fujifilm has tackled this traditional weak point with Super CCD SR; a new technology that places both a low and a high sensitivity light sensor at every pixel location; conventional digital cameras have to make do with just one sensor. What this expanded sensitivity means is that your camera is not forced to choose between exposing for the dark bits or the bright bits. In fact, the only choice you face is between these three Super CCD SR cameras.

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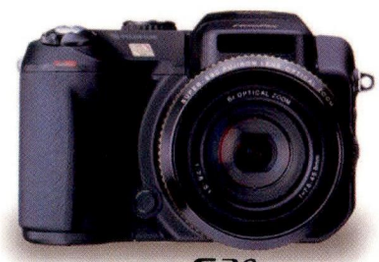

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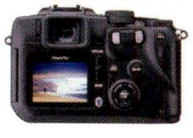

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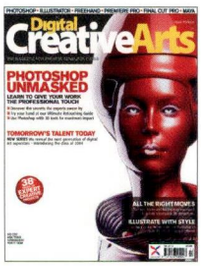

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# THE PROFESSIONAL TOUCH

THEY SAY YOU LEARN SOMETHING NEW EVERY DAY. SO BREATHE DEEP AND READ ON AS THE EXPERTS REVEAL HOW YOU CAN ACHIEVE POLISHED PHOTOSHOP PERFECTION

**It's become a cliché to say it, but Adobe's pro imaging app is so popular and so powerful that it's actually morphed into a verb, and you don't have to be an expert to know that 'to Photoshop' a picture means to retouch it.** But while the man in the street knows that Photoshop exists, and most digital artists are aware of how often it is used and the power it really wields, very few people know it well enough to get the best out of it. This isn't just the case in the retouching world – although the fact that many people still consider a bit of red-eye removal serious retouching work does speak volumes. Whatever field of creativity you indulge in – be it Web design, filmmaking, effects or photography – there's more you could be getting out of Photoshop. With this in mind, *DCA* has spoken to some of Photoshop's top creative users to find out how they handle the app so, you too, can become a master with the program that matters.

While Photoshop is an application that's logical enough for the beginner to pick up and use to create pretty pictures, it's also extensive and ambitious enough that there are functions and features that only a talented few know are there to exploit. It's a bit like running – most people can manage to puff and pant along, but few of us are Paula Radcliffe or Maurice Greene. Equally, *Digital Creative Arts* can't magic up artistic potential that

# PHOTOSHOP FOR... THE PHOTOGRAPHER

Bruce Racine
Photographer
www.bruceracine.com

**CV HIGHLIGHTS:** Motorola, Intel, Sony PlayStation and the Girl Guides of America. Stock for www.masterfile.com.

**OTHER SOFTWARE USED:** I use ImageReady CS to prep files for the Internet and fotoQuote 4 for pricing guidelines.

**HARDWARE USED:** Macintosh Dual G4 with 1Gb RAM and 20" Apple LCD

**FIRST ENCOUNTER WITH PHOTOSHOP:** I started using Photoshop in 1998 when I bought my first Mac. In those days, most photographers were just starting to use the computer to generate portfolios. This was my main purpose in using Photoshop – making print portfolios for promotion. Prior to this I was using 4x5 transparency dupes mounted in mattes with custom logos. The images were beautiful in the proper viewing environment on a light table, but more often than not art directors were holding them up to windows or fluorescent lighting. It is so much easier having a file to reprint whenever an image is damaged in transport or by coffee! Digital prints are more consistent for viewing purposes as well.

**FAVOURITE FEATURE:** One of my favourites is 'Selective Color'. Prior to using Photoshop, I would be stuck in colour darkrooms for hours and sometimes days coming up with just the right recipe to make a perfect print... changing the colour balance and exposure for each section to bring out all of the most desirable colour. With Selective Color, I can do all of those things in just a few minutes.

**LEAST FAVOURITE FEATURE:** I don't use any of the tools that I don't like, but users should be wary of Contrast and Density because they damage a file's histogram. Levels is really the tool to use to control contrast and density of an image.

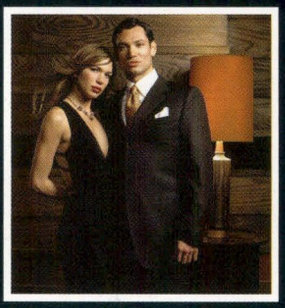
**MOST USED FEATURE:** Levels, History Brush and Clone Stamp. With these three tools an image can be professionally retouched.

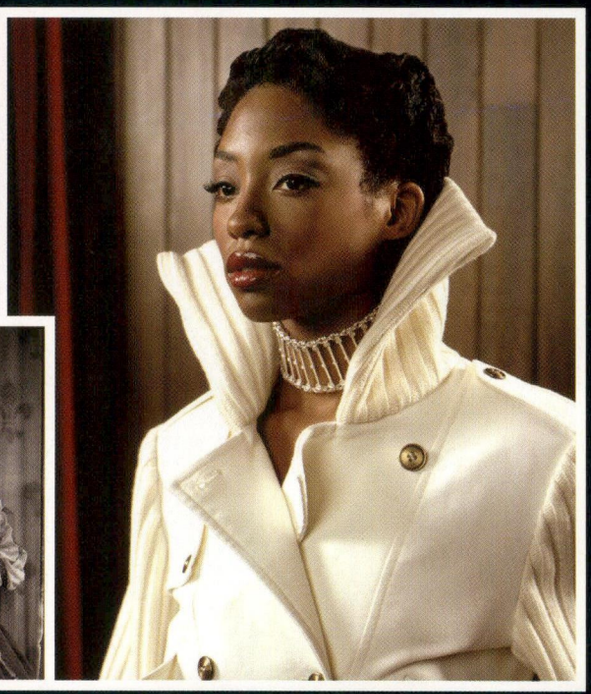
**MOST DESIRED FEATURE:** I like how Illustrator is more intuitive in how you work with type and drawing.

**PHOTOSHOP AND THE PHOTOGRAPHER:** My photo assignments mainly consist of photographing people. I do quite a bit of work for large magazines and cover many types of stories. Professional athletes are usually fun to work with as they are fairly casual personalities and like to participate in making great photographs. In editorial photography I am usually hired because of my particular style, so quite often there is no exacting creative input other than "make him look great". However, I do get some shot lists with no real specifics other than "subject needs to be indoors looking candid" or something of that nature. Other types of work that I do are advertising and annual reports. With advertising jobs, the client and ad agency generally want to know exactly what they are going to get for final imagery before the job starts.

**BRUCE'S TOP PHOTOSHOP TIP:**

For digital shooters that like to photograph people use 'Selective Color' to reduce the oversaturated red frequently found in skin tones by adding cyan/green into the red channel and use the 'History Brush' on the corrected results. Try it for yourself!





All images © Bruce Racine

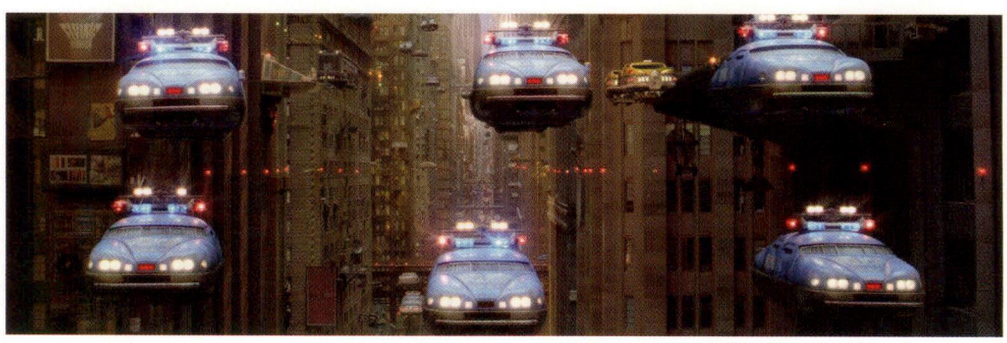
■ *Bruce Racine's contract and stock work feels the force of Photoshop, though with some images more than two hours' retouching means the original is probably a dud*

> "If I ever made a perfect image then why would I ever create any more?"

Any photo assignment has a minimum of three days' work: one for pre-production, one to photograph and one for post-production. If Photoshop is involved in the preparation of the final image and I have to spend more than two hours correcting the image, then the image is likely not good enough to begin with. Photoshop is a large portion of my workload when I photograph stock images, though, and 90 per cent of my stock imagery is digital. This helps to keep costs down as well as be more spontaneous with not having to wait for Polaroids or film. Pride is in the process of creation and not necessarily the final result. If I ever made a perfect image... then why would I ever create more?

you don't possess, but we can hone and train what you already have, as well as take you by the hand and lead you into Photoshop's deepest, darkest depths. Moreover, we can introduce you to the people that know it best: the artists who use it every day.

Benedict Campbell is one such Photoshop expert with a wealth of expertise to share. As well as creating this issue's cover, he has also worked for high-profile clients the world over, and has an impressive portfolio you can check out at **www.benedict1.com**. He began his career as a photographer, but was soon seduced by the exotic world of 3D. Now he uses Cinema 4D, as he explains: "All the 3D modelling is done first – the helmet and the



■ **The Fifth Element** *is just one of a large number of Hollywood blockbusters to have been graced by Charles Darby's brush*
©*The Fifth Element* 1997, Dir: Luc Besson, Studio: Columbia Tristar Digital matte supervisor for Digital Domain (Venice Ca)

# PHOTOSHOP FOR... THE WEB DESIGNER

Kevin Airgid
Freelance Web Designer
www.airgid.com

**CV HIGHLIGHTS:** Isometric illustration for the Canadian Broadcasting Corporation and personal site.

**OTHER SOFTWARE USED:** I use Flash MX Pro and also Adobe Illustrator to create my isometric illustrations and other vector illustrations for Flash. I use Macromedia Dreamweaver MX 2004 and Contribute 2.0 a lot when I build flat file sites for clients. Using these two tools enables me to produce well-designed sites that my clients can actually update themselves.

**HARDWARE USED:** I work on a Dell 8250 with a Pentium 4 and 2.6 GHz. It has a dual monitor set-up and I run Windows XP.

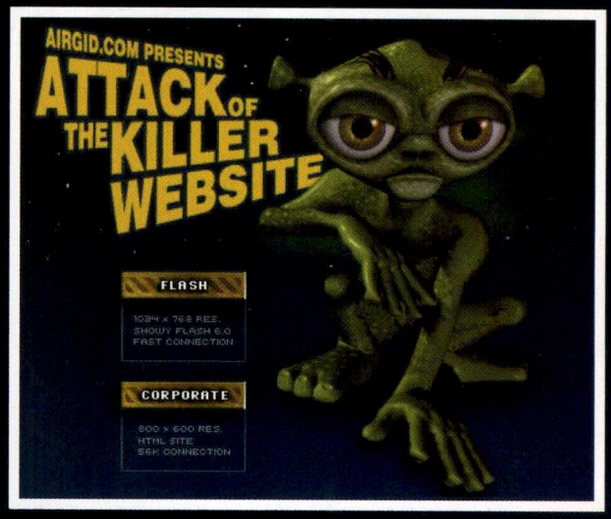
**FIRST ENCOUNTER WITH PHOTOSHOP:** I first used it at version 2.0 while I was at The University of Western Ontario. I created my first Web project later that year, using it to export JPEG files to the Silicon Graphics 'blue toaster box' we used as a Web server.

**FAVOURITE FEATURE:** Its ability to save to alpha transparent PNG files. This feature makes it possible to build up scenes in Flash from complex layers in Photoshop. I love the fact that I can create a slight glow and import it into Flash. The buttons on my current site (**www.airgid.com**) that flash yellow use alpha transparent graphics. You could do it through vector, but it never looks as good.

**LEAST FAVOURITE FEATURE:** I absolutely hate the Preview pane when the 'Save to Web' dialog box appears.

**MOST USED FEATURE:** One of the features I use a lot is the ability to create "droplets". I love creating mini-programs to process many images and this is one of the killer features of Photoshop. Many of my projects require that many different images have the same look and feel.

**MOST DESIRED FEATURE:** Anything 3D. Once upon a time I was a software evangelist for MetaCreations' Infini-D 3D. I used Poser 5 for the characters on my current site. While I think Poser is a great tool, in the near future I'm going to take a dive into Lightwave.

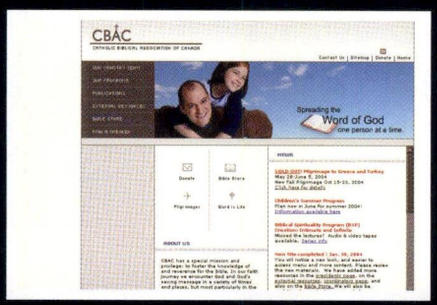


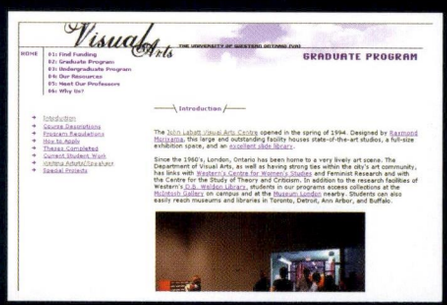

*Websites need to be the perfect blend of form and function, and Photoshop helps Kevin Airgid meet his clients' needs.*

**PHOTOSHOP AND THE WEB DESIGNER:** I use Photoshop and Flash equally in my day-to-day work. Most of the projects I work on are designed for broadband so file-size constraints are not much of an issue. This gives me the ability to inject a lot more raster (or bitmap) art into my projects. I'm never really satisfied with how vector objects look in Flash – I know people who go to great lengths to make vector objects look like bitmaps, but unless I'm working on a project for 56k, I steer clear of creating everything in vector. Nothing can compare to the subtle edges and effects that can be produced in Photoshop.

> "Nothing can compare to the subtle effects that can be produced in Photoshop"

A typical project lasts between three to five weeks. Communication between the client and myself is important and I ask clients to give me examples of sites that they like, and why they think they work. I love working with Photoshop for my comps because I can quickly change things based on their feedback. In most projects I produce three design comps, but often I'll give clients sub-versions of comps with the same design but with a different colour palette or font. Some clients try to 'smorgasbord it' until they arrive at a design that no one likes. Regardless of whether the client makes two changes or 20, making those changes will take twice as long if my Photoshop files aren't well organised. I'm pretty religious about naming layers – there's nothing worse than opening a Photoshop file to find a hundred layers with the default names!




All images © Kevin Airgid

*Kevin does a lot of work for national bodies in Canada, as well as various charities and non-profit organisations*

**KEVIN'S TOP PHOTOSHOP TIP:**

A great tip to make your Photoshop life easier is go out and buy a dual monitor display card and a second cheap 17-inch monitor. Place your image on the good monitor and all of your palettes on the crappy monitor. You'll be amazed at how much this speeds up your workflow.

face [in the case of the cover] – and then I work out what photographic elements are needed, shoot them and add them in with Photoshop."

As Benedict puts it, he then "plays around" to get a realistic look. Modesty aside, what Benedict is describing is the difference between a great piece of art and something that could have been great. Using the 'Pillow Emboss' as well as plenty of brush work, Benedict can hone his work until he gets exactly the effect he desires. His mastery of Photoshop and the time he spends getting it to look 'real' makes the image jump off the page, something that couldn't have been accomplished without the power of Photoshop.

By using the Adobe app with a 3D program – Cinema 4D in this instance – Benedict has a plethora of tools at his disposal, and ones that perfectly suit the work he wants to accomplish. In order to maintain the flexibility that Photoshop layers offer, for example, Benedict renders out different layers of the model from Cinema 4D. This enables him to keep things like reflections and shadows separate, and means he has complete control over them once they are in Photoshop.

## BE CONFIDENT

As Benedict's use of Cinema 4D illustrates, one of the first big Photoshop secrets to get your head around is to know its limits. The use of 3D is the perfect example of this, because while there's much you can do to mimic a 3D effect in the program, it isn't a 3D space and if you really need to model then you need to use an application specifically designed for the task. The same is true of its illustration capabilities – you can certainly do lots of the things you might want to, but you need Illustrator, FreeHand or CorelDRAW if you really want to concentrate on vectors.

But using other applications doesn't mean abandoning Photoshop. In fact, as you'll read from the experts here, Photoshop is often the place where the different elements come together, the place where 'i's

# PHOTOSHOP FOR... THE RETOUCHER

Glenn Honiball
Retoucher
www.retouch.ca

**CV HIGHLIGHTS:** Through ad agencies, work for a broad range of clients.

**OTHER SOFTWARE USED:** I'll occasionally use Quark for generating EPS position files for use in Photoshop. Illustrator is used on occasion, and in the past I have used 3D programs to create objects that did not exist.

**HARDWARE USED:** I work on a G4 and a dual G4.

**FIRST ENCOUNTER WITH PHOTOSHOP:** It was version four. Prior to that I had worked on a Silicon Graphics Indigo 2 computer running Alias Eclipse and Barco Creator software. And before that I started my career on a Hell Chromacom system, a German proprietary system that was effective but rather cumbersome to use – retouching commands had to be typed in via string commands! No pretty little icons. The Hell system was one of the first systems in Canada. It was one of the few systems that could do retouching – that and the Scitex. Apple computers were not capable of much back then. In fact, I remember doing an Apple Lisa ad on the Chromacom System!

**FAVOURITE FEATURE:** I use the History Brush for just about everything. It saves me having to make masks. I'll make any correction to an image, take a History snapshot and brush in the correction in the area I wish to change. It's a big time saver and the corrections look very natural as they can be brushed in with a variety of brush attributes.

All images © Glen Honiball

**LEAST FAVOURITE FEATURE:** I think Photoshop has fixed it now, but the two-gigabyte limit on files was a real pain. They changed a couple of the shortcut keys around which I found to be annoying, but I guess it's whatever you get used to.

**MOST USED FEATURE:** I use Curves a lot, the Channel Mix and Selective Color too.

**MOST DESIRED FEATURE:** I wish Photoshop's Selective Color tool allowed you to pick your own colour and not select from a pre-determined set of colours. There is a plug-in for Photoshop called Coco that is very good but it's very expensive. I wish Photoshop would update to something like Coco.

**PHOTOSHOP AND THE RETOUCHER:** Basically a client will supply an image and instructions as to how they would like it to be retouched. This could be anything from a simple clean up to merging images together, creating shadows, changing colour or extensive cloning and reshaping.

*Before and after: Photoshop allowed Glenn to remove a boisterous family from the back of a car and then re-colour it.*

*Photoshop can even make a plate of chips look more appetising!*

Some clients are the artsy-fartsy types that wave their hands around and no one – including themselves – really knows what they want. Other clients are quite clear and concise. I am fortunate that I have an artistic background and I am technically inclined, pretty laid back and very visual. I pick up on clients' needs and wants quickly. I'd actually prefer it if a client just simply tells me the final look and 'feel' they are after, then walks away and lets me do my thing.

> "If you're not sure how to create a shadow, then have a look around you"

There are other retouching programs out there, but Photoshop appears to be the norm. I don't think there is anything that can't be retouched. I have never said 'no' to a request. I always tell people that "retouching is limited only by one's imagination." If you can dream or hallucinate it, I can do it. Shadows appear to be a big problem for people. If you're not sure how to create a shadow from scratch, then have a look around you. Look at objects when you're outside walking or driving around and see where shadows fall and how light reflect on objects. It's funny – sometimes I look at a real object and see something that could be retouched!

**GLENN'S TOP PHOTOSHOP TIP:**

Pick up a colour tint book and get to know colour. You can do this with readings you take with the Eyedropper/Info box. Many people rely on their monitors and inkjet proofs for what the colour looks like. If these devices are not calibrated properly then you'll be off from the word go

are dotted and 't's are crossed. The trick is knowing which app is appropriate to which task, and that's something that comes with experience. If you're just setting out on a digital art career, then you've got to stay flexible. You're bound to find dozens of programs over the years and you'll come across even more ways of doing things. So don't be worried if you waste time creating a 3D element for something you needn't have bothered with, or don't create one when, in retrospect, you should have done. It's part of the learning process.

To plug-in or not to plug-in is another question that burns in the brain of most digital creatives. It's the usual 'money and time versus end result' equation, and the only real truth is that there's no single way of doing something, no 'right answer'. If you're interested in finding out more about Photoshop plug-ins then have a look at page 108, as we've got a collection that will help you on your retouching way. Some people use loads in their work, others none at all, and there's no discernable difference in quality.

Which brings us to the point of all of this. All the 'professionalism' in the world isn't worth an anti-aliased pixel if it doesn't add up to a stunning image, a breathtaking movie or a glorious Web site. Put another way, it doesn't matter if you're the quickest draw with your keyboard shortcuts, the slickest at optimising

© Bruce Racine

*From tiny cover-ups to massive alterations, Photoshop does it all*

# PHOTOSHOP FOR... THE 3D MODELLER

John Harwood
3D modeller
www.johnharwood.com

**CV HIGHLIGHTS:** Apple, Kool cigarettes.

**OTHER SOFTWARE USED:** StudioTools from Alias is the main one.

**HARDWARE USED:** Over the years the hardware has been replaced several times and the software has been updated, but my system is still much the same – StudioTools running on SG machines, Photoshop running on a Mac, and a large Glyph Firewire disk array.

**FIRST ENCOUNTER WITH PHOTOSHOP:** I started using both Photoshop and a 3D package in the late Eighties. My arsenal consisted of three 'modules': Barco High End retouching software, Alias/Wavefront 3D software, and Illustrator and Photoshop. A typical request was to produce 3D lettering, which was done in Illustrator. Because the vectors didn't convert perfectly, results were only attained when the type was rasterised in Photoshop and the bitmap imported into 3D.

**FAVOURITE FEATURE:** For me, the best attributes of Photoshop are definitely its layering capabilities.

**LEAST FAVOURITE FEATURE:** None. Although at the outset, Photoshop's role was a very limited one.

**MOST USED FEATURE:** Levels, Hue and Saturation, Contrast, Gaussian Blur, Unsharp Masking and the Pen.

**MOST DESIRED FEATURE:** None now. But in the early days, when an art director visited the studio, the image had to be shuttled into the more 'professional' Barco. They'd have been horrified if they'd known that Photoshop – definitely not an 'industry standard' software then – was being employed!

**PHOTOSHOP AND 3D MODELLER:** By the mid Nineties, I noticed that my American clients – the big advertising agencies – were adopting Photoshop more and more, and there was less kudos attached to any other 2D system. It had become a universally accepted piece of software where everyone could talk a common language. The Brits followed suit in this shift in attitude a few years later. I think everyone using and experimenting with Photoshop at that time was burning serious quantities of midnight oil discovering a trillion different ways of portraying an image.

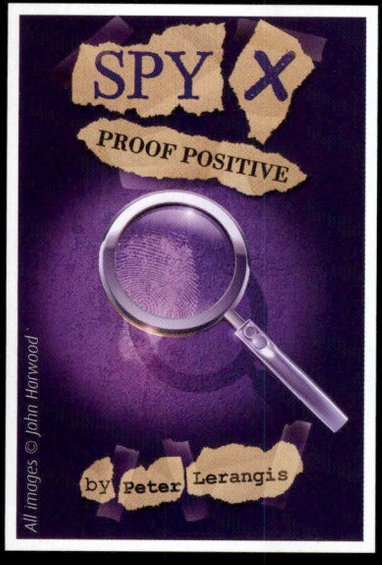
Some commissions nowadays take no more than a day, and some can go on for months, depending on the complexity. Advertising deadlines are always extremely tight, so fast turnaround times are essential and there is no time for experimentation. Input from art directors can range from a rough scribble to an intensely worked-up Mac layout. I also believe in keeping the amount of software programs down to a minimum. A comprehensive program should contain all the tools you need, but at the same time it should not collapse under its own weight of plug-ins and fancy features.

> "A program should not collapse under the weight of its plug-ins and fancy features"

**JOHN'S TOP PHOTOSHOP TIP:**

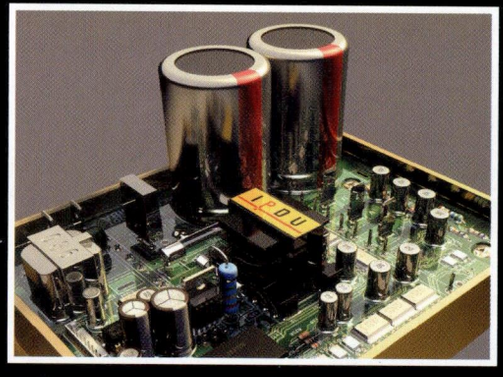
The best tip is to use any software subliminally. It should become an extension of the user's mind and hand. It's what you do with the tool that counts. I find Photoshop extremely easy to use, and I don't realise I'm doing it. Ultimately the genius should lie in the creator, not the tools.

*John Harwood used Photoshop to comp together models of the planet Earth and the pump, and then added all the shadows and highlights that made them fit*




All images © John Harwood

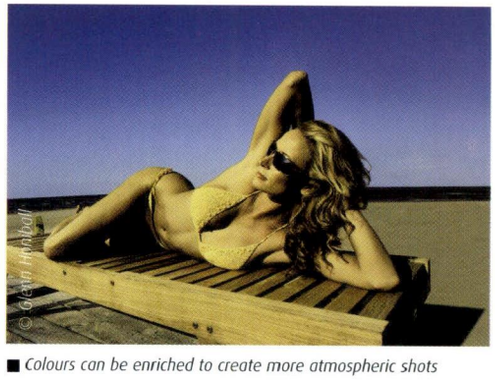
*Lots of Photoshop layers transformed this render into a polished piece*



*This image was made up of two 3D renders that were then merged in Photoshop*

images for the Web and have the most plug-ins sticking out of your top pocket if your perspective is off, your use of colour abysmal and your artistic flair non-existent. Rather than being good with Photoshop for the sake of being good with Photoshop, the aim should be to translate what you learn about the program into great images. For instance, the necessities of high-resolution images and CMYK for printing may be boring, but if you don't learn to work with (and around) these factors then your work will never be as good as it could be.

It's often the finishing touches that reveal the work of a master, so make sure you can always achieve these in your images. Details like shadows, reflections, text, texture and perfect perspective can be the difference between an image that's merely interesting and one that's absolutely brilliant. The worst thing you can do, whatever your artistic project, is to give up at the almost-there stage. Unless a deadline forces you to finish before you're a 100 per cent happy with something, then don't. Trust your instinct – if it tells you there's something not quite right then the likelihood is that you're right. Give yourself the time and use the skills necessary and your work will have 'wow' factor, which is what it's really all about. Whether you have any ambitions to be professional or not, your work always needs to be polished and look finished, because



*Colours can be enriched to create more atmospheric shots*

# PHOTOSHOP FOR... THE DIGITAL MATTE ARTIST

Charles Darby
VFX Designer and Digital Matte Artist
www.rushes.co.uk

**CV HIGHLIGHTS:**
*Titanic, The Matrix, Minority Report* and *Harry Potter And The Prisoner Of Azkaban*

**OTHER SOFTWARE USED:**
I work at Rushes and there's no such thing as an average VFX shot, so the tools required vary all the time. For the matte painting section I keep it simple, though – just Photoshop.

**HARDWARE USED:**
Apple G4 or G5 and as much RAM as it's possible to fit in it.

FIRST ENCOUNTER WITH PHOTOSHOP: I was introduced to Photoshop after having learnt Matador in LA around 1995. I think it was version three. I used it for the first time in some very basic ways for *Waterworld* and loved the layering system. Matador was not part of my toolbox after that... too slow and restricting. I had no one to learn matte painting from so I created my own way.

FAVOURITE FEATURE: The Layer system and the History function. For obvious reasons, going back to a brush stroke I should not have made is wonderful.

LEAST FAVOURITE FEATURE: Constant changes to the interface with features moving in upgrades for no apparent reason. It's horrid and unnecessary for me.

MOST USED FEATURE: The Brush, the Layers, the History... all of the obvious tools I suppose.

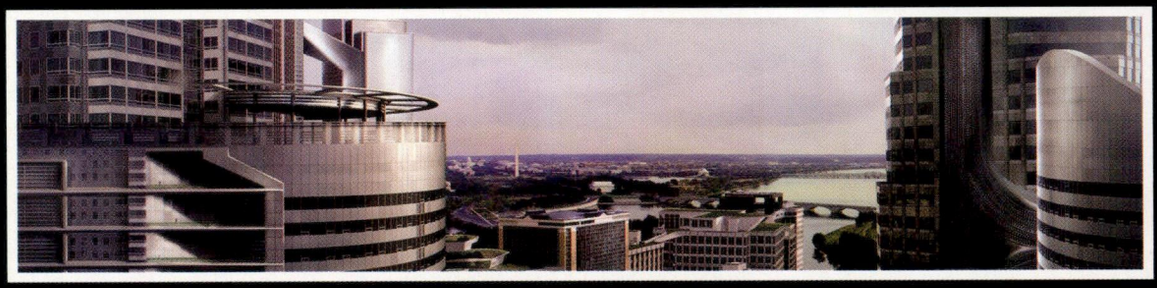
MOST DESIRED FEATURE: For it to work image-resolution free and 10-bit would be great. Give the film people some gadgets for once, don't give them all to Web-based people!

"Some people are surprised I use Photoshop as a paintbox..."

PHOTOSHOP AND THE DIGITAL MATTE ARTIST: I work with directors to come up with the look, style and composition of the shots I create. Using watercolours and pen and ink sketches I produce my concept of the shot, indicating the general tonal qualities, scale and position of the subject. Having been given the okay I scan the image into the computer and within Photoshop use it as a kind of base painting or map. What Photoshop allows me to do is break up my composition into sections, as it needs to exist for a compositor later on so we can position live-action or 3D elements within the painting. Once I've completed the breakdown of which layers should be where – from foreground to background – I block in the areas as if it was a traditional painting. They are simple shapes but quite accurate.

Then I either paint elements from scratch or import references that are either augmented or used simply as inspiration (sometimes it takes longer to change something than paint it from scratch). Some people are surprised I use Photoshop as a paintbox but it's good for what I do and other packages mostly emulate a watercolour or oil painting rather than offer a better solution. I must say that I use Photoshop in its basic form and there are whole sections of the program I don't use at all. I don't always upgrade to the latest version either, as it's not necessarily better for what I do. For instance, I used Photoshop 3.5 for *Titanic* when a much newer version was available. Ultimately... the painting should match the director's vision and be exported, layers and all, to the composite stage where it comes alive.

*Leading digital matte artist Charles Darby doesn't get hung up about Photoshop version numbers – he worked on blockbuster* Titanic *in 3.5!* © *Titanic* 1997, Dir. James Cameron, Studio: 20th Century Fox. Digital matte supervisor for Digital Domain (Venice Ca)



*Layers is crucial when Charles has to paint and construct background elements in Photoshop*
© *Minority Report* 2002, Dir. Steven Spielberg, Studio: Dreamworks Supervised by Charles Darby for Digital Firepower

CHARLES'S TOP PHOTOSHOP TIP:
Keep it simple – it does work!

that helps separate the goat from the sheep, the men from the mice, the artists from the enthusiasts.

## Photoshop for everyone

It isn't all about wanting more, more, more, though. Using Photoshop is not only a technical and an artistic endeavour, it's a practical one. Dismissed by many as unimportant, the truth is that the more efficient Photoshop user you are, the more productive and happier you will be. Adobe has made this easier with the Creative Suite, as the various apps are united by Version Cue, which will make sure your files are always in the right place and the right version. Don't worry if your version of Photoshop isn't brand new either, as fundamental features like Layers and History will ease most of the imaging headaches. Then there's the Automate feature for batches of images, which makes work up front but saves a lot of time in the long run.

Whatever type of digital artist you are, it's likely that Photoshop is at the heart of your workflow. But even with such a versatile program as Photoshop, it's possible for you to get stuck in a creative rut. You've got used to the Magic Wand tool creating your cut-outs, so you always do it that way. Never mind that it might be more precise with the Pen tool, or quicker and easier with the Channels. It's fine to have your own way of doing things – anything to translate your individual artistic vision into your images – but there's no harm in shaking things up a bit. So next time you reach for a Photoshop tool, think about what you need to do and if there's another way of doing it. Never mind if you're not entirely sure about how to go about it – just have a go. Learn enough from others so that you're confident in any software situation, then throw the rule book away and find out what works for you. Be true to yourself, never give up and practise, practise, practise. There'll be no stopping you. ■

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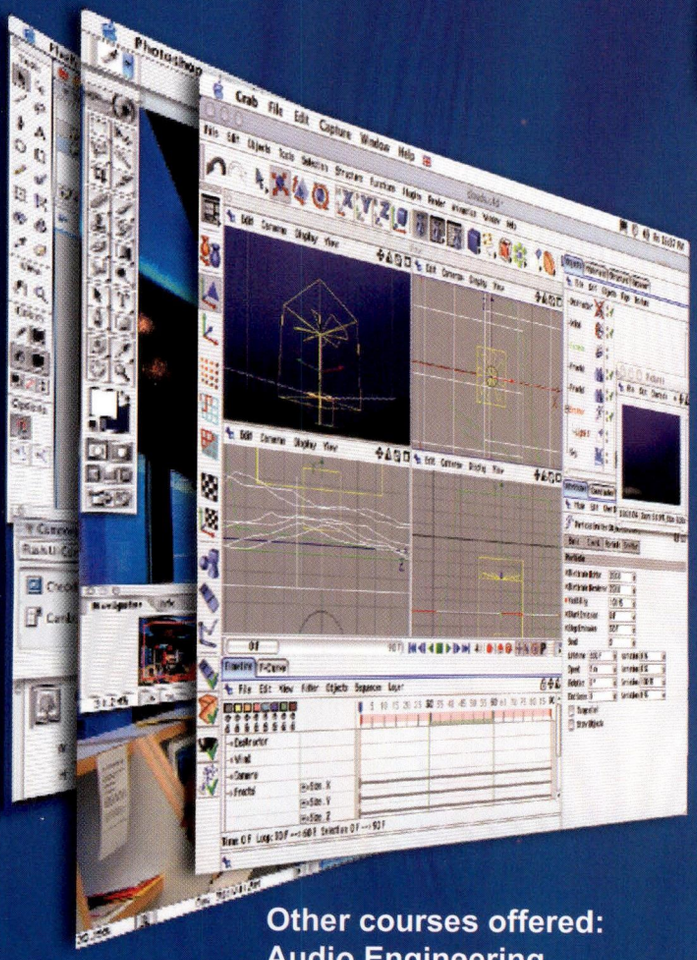

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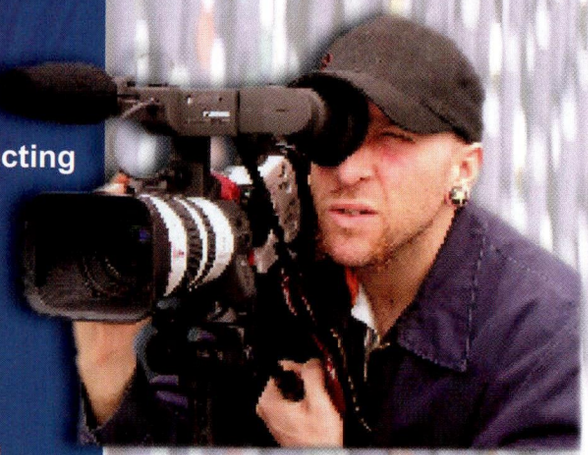

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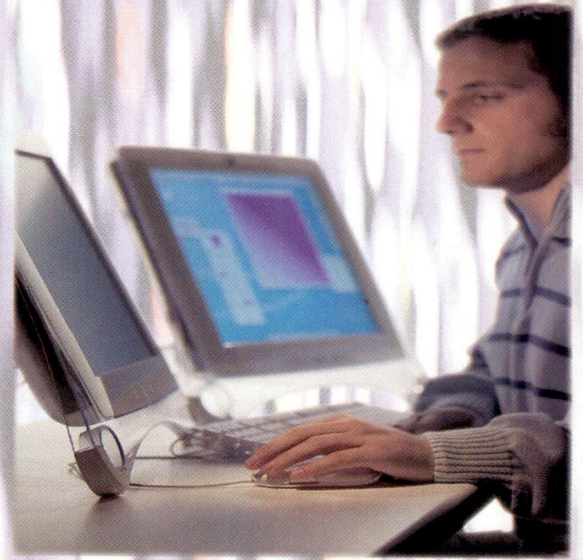

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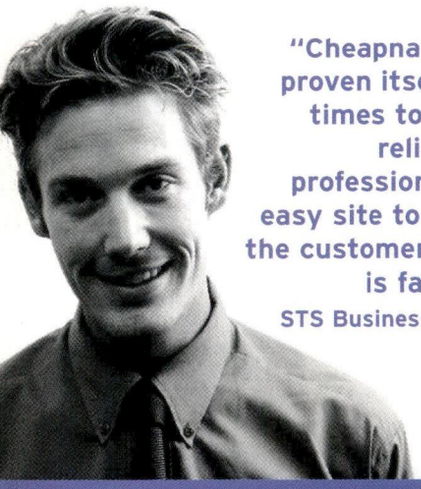

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# Digital Creative Arts workshops

## WORKSHOPS THIS ISSUE


**30** THE ULTIMATE RETOUCHING GUIDE IN PHOTOSHOP CS
Retouching is such a major part of the imaging process that it's critical you do it properly. We show you all the secrets so you can create perfect cover models of your own

**36** CREATE TEXTURES IN PHOTOSHOP CS
Need an organic texture and don't have the time to find one, photograph it and then scan it? Then why not make one? Photoshop has all the filters you need – we reveal all here

**42** USING THE CROP TOOL
Not only capable of simple snipping, Photoshop's Crop tool has hidden depths. We show you how to get the most out of the tricky little beast

**46** CREATE VECTOR RETRO ART
Go back in time and use Illustrator CS to create some amazing retro designs. With vector art the 'in' thing and 1950s' fashions still cool, this is an essential workshop

**50** CREATE WITH STROKE AND FILL
Illustrator masters need to have a firm grip on the program they use, so we present the definitive guide to using the Stroke and Fill commands in Freehand MX

**60** PERFECT YOUR SOUNDTRACK
Load up the demo of Premiere Pro 1.5 from the CD and dive into this workshop. You'll not only learn about the new version, but also how you can sweeten your soundtrack

**64** BUILD A PICTURE-IN-PICTURE
Picture-in-picture is one of the most versatile effects in the editing world, as this Final Cut Pro primer will demonstrate. You'll soon be ready to go compositing crazy

**74** MAYA MASTERCLASS: PART THREE
In the final part of our Maya Masterclass, you will learn how to animate your Sentinel. And don't forget if you missed parts one and two, you can order back issues from page 102


## TIPS THIS ISSUE


**44** .....Create a studio background
**45** .....Reflections and shadows in Photoshop
**68** .....Use Photoshop filters in FCE
**70** .....Create a camera transition


# HOW OUR WORKSHOPS WORK

By giving you real-life examples to work through, the projects in *Digital Creative Arts* aim to help you improve your skills with the world's leading creative software

**Before and after**
Where relevant, we provide 'before' and 'after' shots so you can see exactly what you'll achieve by following a project

**Your experts**
We go out of our way to find experts who know the programs they are writing about inside out. This way you know that the information we provide can be trusted and is always accurate

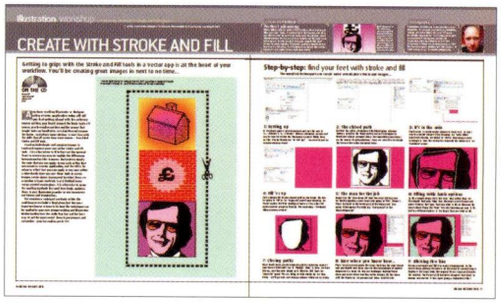
Digital imaging workshop
THE ULTIMATE RETOUCHING GUIDE
Discover the professional techniques that will transform any decent photograph into a high-quality magazine image
Step-by-step: master the tools required for retouching
ON THE CD

**Start to finish**
Each project has a logical start and end point. We'll show you how to achieve a certain effect without skipping any steps

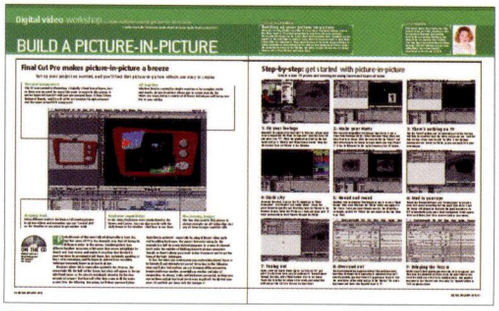
**Project files**
Support files for every project are included on the *Digital Creative Arts* CD. Underneath the logo you'll find a list of every file needed

## Hands-on advice at a glance...

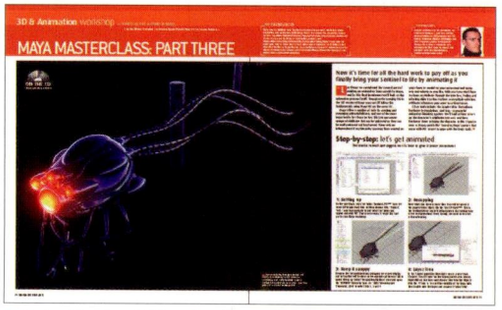
■ *Bring a little flavour of the 1950s to your Illustrator CS work with our retro-oriented Illustration primer on page 46*




■ *Learn to handle your FreeHand MX toolset with the confidence and flexibility of a professional on page 50*




■ *Let your imagination run wild with the possibilities that the picture-in-picture effect offers DV editors on page 64*




■ *Animation is a tricky – but impressive – art. Become an animation master today by turning to page 74*

[ writer: Mireille Frenette and Benoit Guerville | hardware: Pentium 3 PC | software: Adobe Photoshop CS ]

# THE ULTIMATE RETOUCHING GUIDE

## Discover the professional techniques that will transform any decent photograph into a high-quality magazine image

**Take a look at any magazine you've got to hand and peer very carefully at the faces of the beautiful models and actresses that grace its cover and ad pages**. You will see that they have flawless skin, deep, shining eyes and a more-than-perfect body. But if you measured their proportions, you would notice that their legs are way too long, even if they are supermodels.

Photo retouching is everywhere nowadays, even in pictures that look quite natural. About a decade ago, retouching was done by manually painting on photos to get rid of annoying details, but with the advent of Photoshop, everything changed. Now in its eighth version, Photoshop has developed an array of tools that makes it the leader in the photo-retouching process.

In this workshop, you will learn professional techniques to completely transform and enhance photographs. You will discover how to change body shapes, create new backgrounds, paint in new lighting and colour effects, add make-up, paint new hair and more. These techniques are not overly complicated but retouching is a real art and it will take some practice.

Whether you are a professional or not, people are increasingly working on digital pictures that are not of the best quality in terms of compression and definition. We deliberately chose such an image to show you what you can come up with despite adverse conditions. Photo retouching is a creative process by which everything can be changed or recreated to your taste and imagination. What you will learn here will open up a whole new world of possibilities... ■

■ *The original image was shot using natural light and there are some noisy artefacts that we will need to get rid of completely*

■ *The techniques described in this workshop are effective whether you're doing professional retouching work or simply want to boost the glam factor for friends and family in your own pictures. Many thanks go to our lovely model – Fanny Hemet*

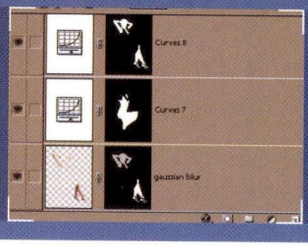
**ON THE CD**

*Fanny.jpg*
*Background.jpg*
*Finished.psd*

CREATIVEPRIMER

## Layer Masks

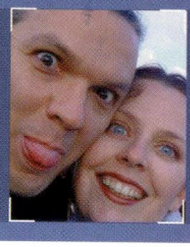
A Layer Mask is a very versatile and reversible tool for selecting and masking. You can blur it to feather its edges, or use 'Control-I' to invert it. You can 'Control-Click' on its thumbnail to load it as a selection or use 'Control-Shift' and/or 'Alt-Click' to add, subtract or intersect selections. 'Shift-Click' on the thumbnail will disable or enable the Mask and 'Alt-Click' toggles Mask visibility – which is very effective for checking semi-transparent areas around an image.




*When a selection is active, you can transform it into a Layer Mask by clicking the second icon at the bottom of the palette. Being able to juggle Masks and Layer Masks is vital*

YOURGUIDE

**MIREILLE FRENETTE** and **BENOIT GUERVILLE** have been contributing articles to creative magazines for several years. Benoit is a screenwriter, director and art director; Mireille a producer, film editor and acting coach. They specialise in film production and special effects, which has given them an in-depth knowledge of Photoshop. Email them at **wide@widecinema.com**

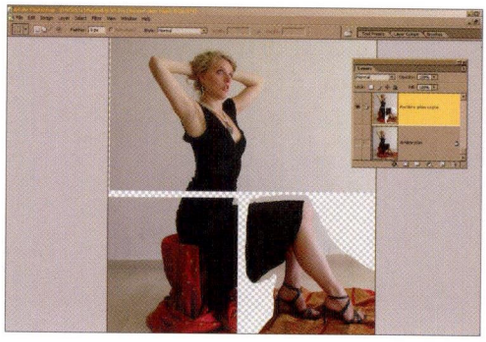


# **Step-by-step:** master the tools required for retouching

Learn the essential retouching techniques that will help you transform even ordinary snaps into glossy images

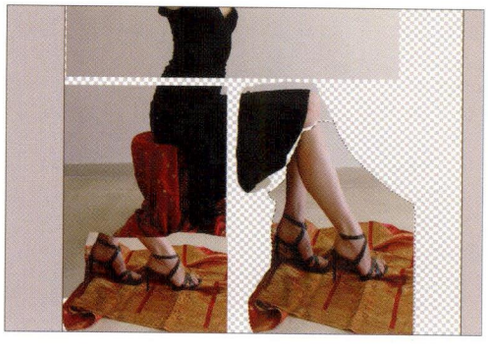
## 1: Raw image

Here is the photo we are starting with. It looks fine but to be really special much needs to be done. This includes touching up skin imperfections and smoothing skin tone, lengthening legs and torso, re-lighting everything, adjusting colours and contrasts and creating a stunning background.



## 2: Basic transformations

First, resize the canvas to get a slightly bigger work area. Second, duplicate the background layer. Third, select the upper body from the waist up using the 'Rectangular Marquee' tool and move it up a bit. Fourth, using the 'Lasso' tool, select the legs area and move it a bit to the right.

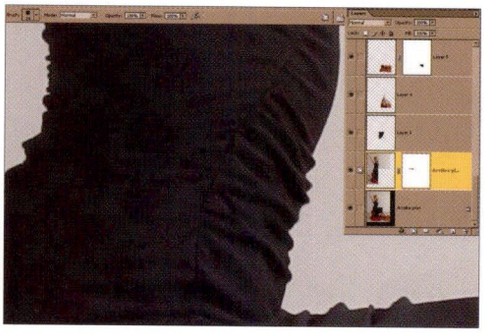


## 3: Long legs

Select the legs below the knee with the 'Magnetic Lasso'. Cut the selection and paste it onto a new Layer. Select the foot area (including the ankles) and move it down with 'Copy/ Paste'. Select the legs from below the knees to below the ankles and use 'Free Transform' ('Control-T') to lengthen the calves.

## 4: Positioning the feet

Put the feet layer on top of the stack, move it in place then adjust the position of the left foot and calf. Create a clean selection of the right calf with the 'Pen' tool. Feather it by one pixel. Press 'Control-T' and hold down 'Control' while moving the lower middle point of the bounding box to the right.



## 5: Bring body parts together

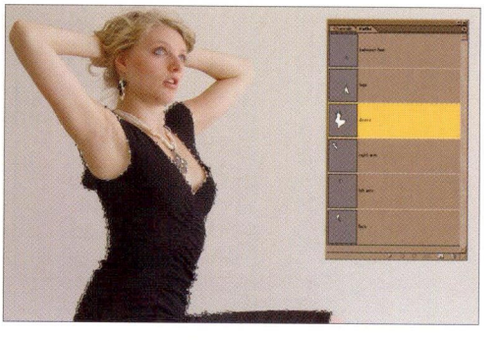
Add a 'Layer Mask' to the feet layer and use it to blend feet and calves together. Turn on the 'Original Photo' layer. Add a Layer Mask to the upper body layer and start painting out the waistline to blend this layer with the original. Use a soft brush to nicely blend seams and folds.

## 6: Altering the skirt

Link legs, feet and skirt layers together. Align the skirt copy to the original along the fold that runs on the right thigh. Select the left thigh part of the skirt and paste it on a new Layer. Use 'Free Transform' to position it properly. As in the previous step, use Layer Masks to blend everything together.

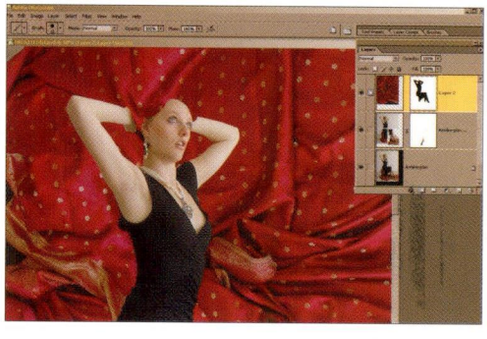
## 7: Finishing the legs

Use the 'Clone Stamp' tool on a new Layer just on top of the original image to roughly hide the legs. On a new Layer on top of the stack, use the 'Clone Stamp' tool to recreate the missing part of the right leg. Choose a soft, 40-pixel brush and work delicately. Do the same for the left leg.



## 8: Creating Selections

Ensure that all corrections are flawless. Link all layers but the original. Merge them down ('Control-E'). You now need very clean selections. Use the 'Pen' tool to draw precise Paths around each body part. Name each Path. When transforming a 'Path' into a 'Selection', always feather it by one pixel.



## 9: Importing a background

Import the 'Background.jpg' image on top of the other layers. Use the Paths you just created to select the model. Use this selection to create a Layer Mask on the background image. To move the Layer without moving the Mask, click on the 'Chain' icon between Mask and Layer thumbnails.

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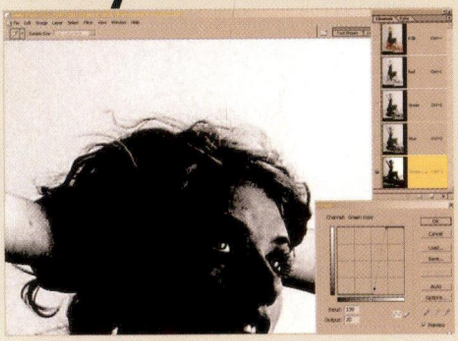
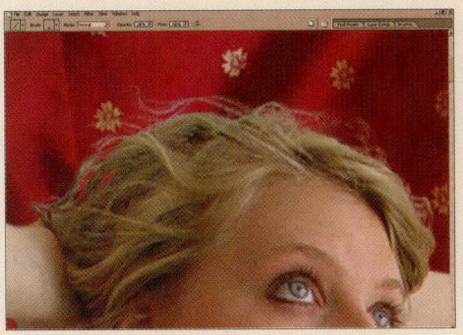
## How to make tricky selections



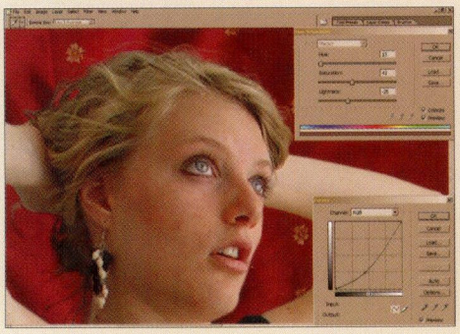
### Selecting the Hair

The picture is very noisy so selecting the hair is a delicate task. Turn off the 'Background.jpg' layer. Duplicate the Green channel in the 'Channel' palette. On this copy, apply a Curve adjustment to bring up the best possible outline. Although the noise makes it quite messy, it's a good start.



### Refining the selection

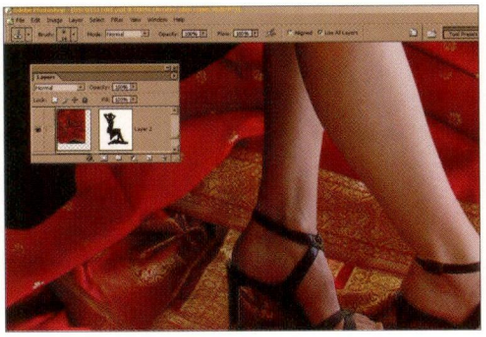
Make a loose Selection around the head. Fill outside it with white and paint out unwanted details. Press 'Control-I' then 'Control-Click' on the Channel thumbnail. Go to the Layer Mask for 'Background.jpg' and fill the selection with black. Tidy up the Layer Mask with a little semi-transparent brush.



### Colour correction

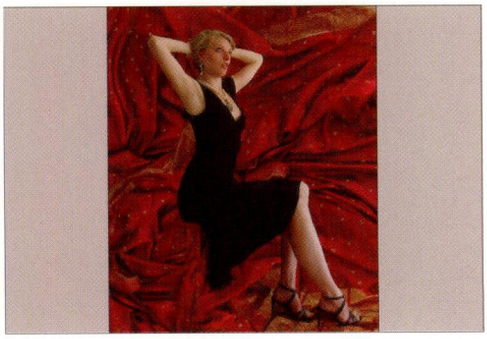
You probably won't be able to get rid of all the outline artefacts. Loosely select the problematic areas (top of the head and down the neck). Create Hue/Saturation and Curve adjustment layers to give hair an overall reddish colour matching the background and darken the neck hair.

## Continued...



### 10: Background blending

It's now time to blend the various background elements with the fabric the model is resting on. Start to paint on the background Layer Mask with a soft brush to blend it with the foreground fabric (before doing so, be sure to create a new Channel containing the intact model outline selection).

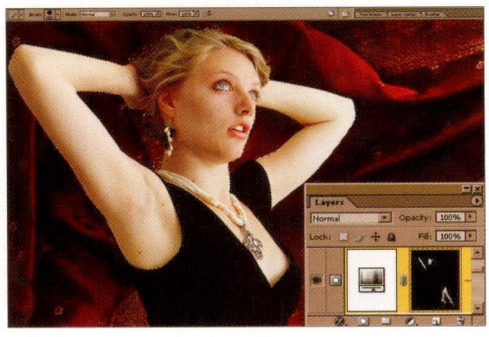


### 11: More background

Duplicate the background (fabric) layer, press 'Control-T' and 'Right-Click' to flip it vertically. Blend as before. Follow the fabric folds and arrange them in a way that pleases your eye. Cut and paste small fabric pieces and blend them where needed. Crop the whole image to get rid of the borders.

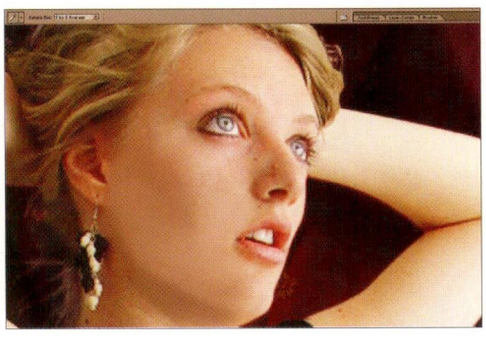
### 15: Background styling

Create a new Curve layer and push up the highlights. Now fill the Layer Mask with black. Then, with a 250-pixel, white, soft brush, give more shine to the main folds of the background fabric. The fabric will come alive and the contrast with the model will balance the image.



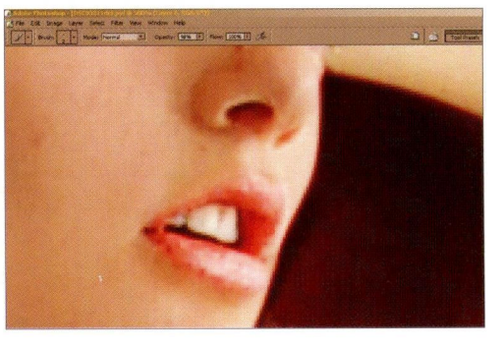
### 16: Removing blush

The adjustments you've made to the skin have pushed the saturation up in some areas. Create a new 'Hue/Saturation Adjustment Layer'. Set the Saturation to '-2' and fill the Layer Mask with black. Then activate the skin selection and paint with a soft white brush on the cheek, forearms and calves.



### 20: Painting the new skin

Take the 'Brush' tool and start painting soft strokes. Press 'Alt' after every stroke to call the 'Eyedropper' and sample the colour. Be careful to follow all the shapes of shadows and highlights on the face, as they (and their colours) are totally responsible for the shape of the face.



### 21: Adding lip gloss

Set the Layer opacity to '70%'. Create a new Layer and select the lips and inner part of the mouth. Set the 'Stamp' tool to 'Use All Layers' and duplicate the lips. Set the Layer to 'Overlay' and reduce its opacity to '55%'. Use the 'Hue/Saturation' command to give it the right tone.

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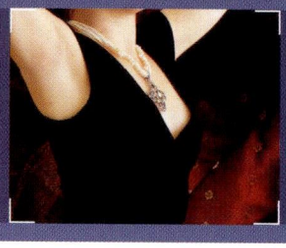
## Background and foreground

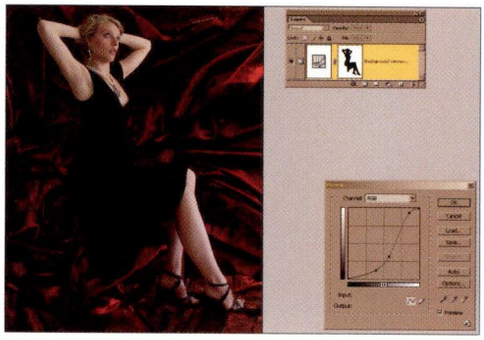
When taking your picture, think of the background you'll use in Photoshop to ensure that they share roughly the same lighting direction. Then use Adjustment Layers with a Layer Mask to paint new lighting effects afterwards and you can dramatically change the mood of the original background. Always check that the blacks in the foreground and background images have similar contrasts. To do this, put a Level Adjustment Layer on top of the stack and pull the middle slider nearly all the way to the left. This will reveal any mismatch.



*When combining a background and a foreground, be sure to check for the overall tone of the blacks and whites in the image and adjust them if necessary. Use your artistic eye as a guide*

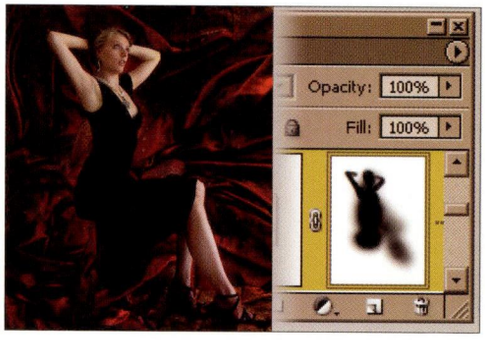
WEBRESOURCES

Going to the Photoshop page of the Adobe Web site (**www.adobe.co.uk**) should be your first port of call for Photoshop retouching advice. Also, registering at **http://studio.adobe.com/uk** is useful, as there is much information you can unearth there. At **www.creativepro.com**, search for 'retouching' in the 'articles' section of the site. You'll find topics at this site such as'Going from Brunette to Blonde', 'Eliminating Dark Under-Eye Circles' and 'Photoshop Cosmetology'. All very useful!



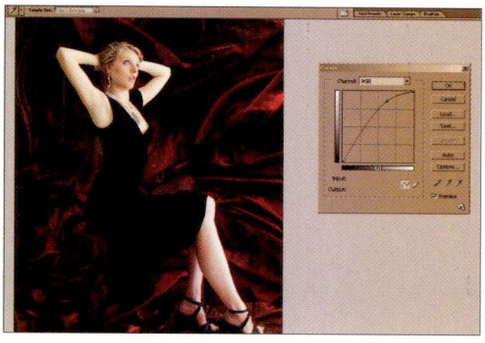
### 12: Creating the mood

This is where the creative work begins. Using 'Adjustment Layers', you're going to paint new lighting effects to define a strong mood. Activate the model selection and create a Curve Layer to darken the background. The fabric should now have a deep and luxurious colour.



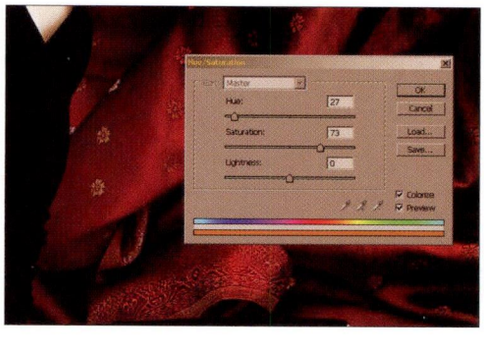

### 13: Painting light

Because of this Curve adjustment, our model now seems simply pasted on the background: the result is flat and fake. To fix this, use a big brush to paint on the Curve Layer Mask. Darken the lower part of the body and paint around her chest to lighten the background – this will make her stand out.



### 14: Skin tone

You are moving towards an image that's got a very graphic and stylish look that contrasts with the model's skin tone – it is way too natural looking. Activate a selection for her skin (using a Path you've created before) and create a new Curve Adjustment Layer to lighten her skin.

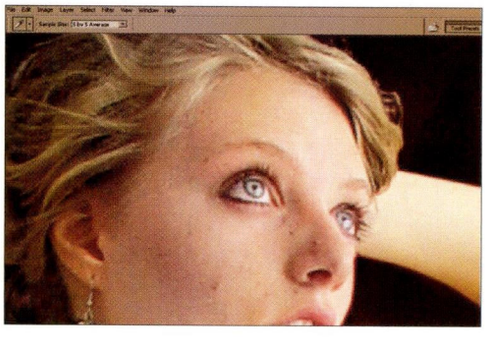



### 17: Colour balance

The dress has a bluish tint giving our montage a fake look. Select the dress and create a Hue/Saturation Layer. Set it to 'Colorize', 'Hue' to '27', 'Saturation' to '73' then set the 'Layer Opacity' to '55%'. 'Colorize' reduces the polychromatic noise on the dress and matches its colour to the ambient light.

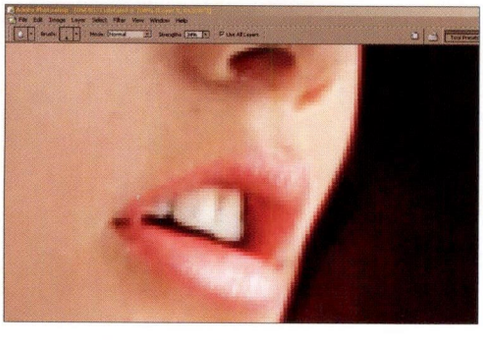
### 18: Last colour adjustments

Create a new Hue/Saturation Layer. Set 'Saturation' around '-80' and 'Hue' on a value that suits you. Paint the Mask so that the model is not affected and that the correction does not apply to all the fabric folds. Create a new Curve Layer to darken the border of the image and make the girl stand out.



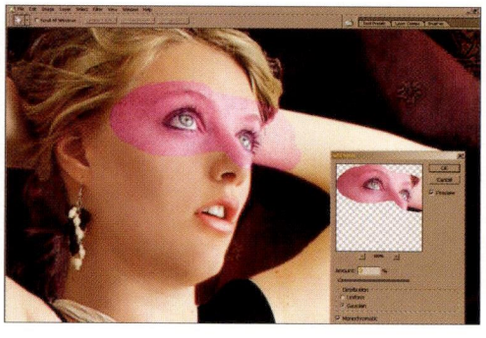
### 19: Erasing artefacts

The artefacts on the face are a real problem. To minimise them, you'll use the same method that would be used to soften the skin grain. Create a new Layer on top of the stack. Set the 'Eyedropper' tool on '5x5 Sample Size' and choose a soft brush between 20 and 50 pixels with '30%' opacity.



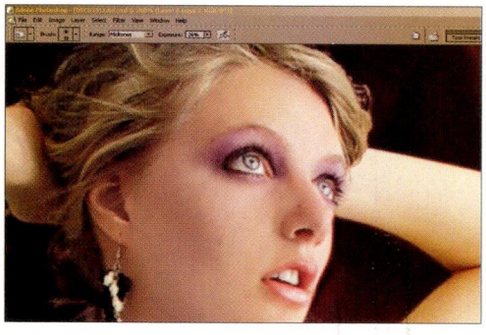
### 22: Perfecting the lips

Create a new Layer and set the 'Blur' tool to 'Use All Layers'. With a small brush, blur the artefacts on the lips. Then, on a new Layer, use a one-pixel, white, soft brush to paint vertical highlights and give back some definition. Finish by painting a delicate pink outline around the lips.



### 23: Applying eye make-up

Create a new Layer and press 'Control-Shift-Alt-E' (copies all visible layers on this new layer). Select roughly around the eyes and delete everything else. Press 'Control-U' and change the 'Hue' setting to a make-up colour that suits you. Then, apply the 'Add Noise' filter set at three pixels.

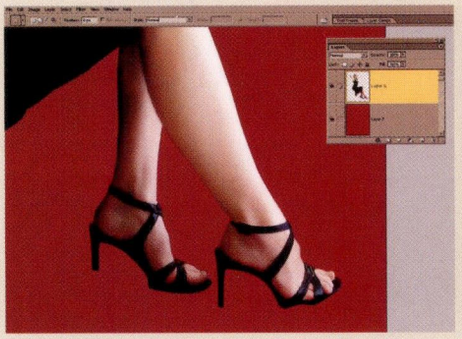


### 24: Painting make-up

Apply a 'Gaussian Blur' of '0.3' pixels. Add a Layer Mask and, with a big, soft, black brush, paint out the make-up where needed. Again, use the 'Hue/Saturation' and 'Curve' adjustments to get the exact make-up colour you want. Touch up with 'Burn' and 'Dodge' tools.

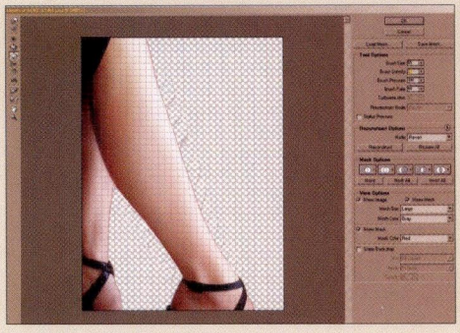
# THE ULTIMATE RETOUCHING GUIDE

## Body remodelling



### Remodelling basics

It's relatively simple to modify body shapes with Photoshop. You can use the 'Free Transform' method you've used previously or, in other cases, rely on the 'Liquify Filter'. Start by pressing 'Control-Shift-Alt-E'. Select the model and delete everything else.



### Liquify the legs

Draw a rough selection around the right lower leg and open the 'Liquify' filter. Use the 'Bloat' tool (Brush Size 55, Density 25) to paint just outside the calf so as to reduce it. Paint a long stroke on each side of the calf. Use the 'Reconstruction' tool if you mess up.

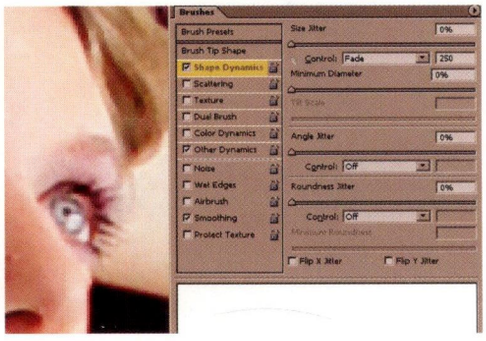
### Slimming down with shadows

Shadows are also a good way to make body parts look thinner. Using the 'Burn' tool, paint a light shadow on the back of the calf. You will have to make adjustments to your background to compensate for what you've taken out of the calf, but it should make a noticeable difference.

## Continued...

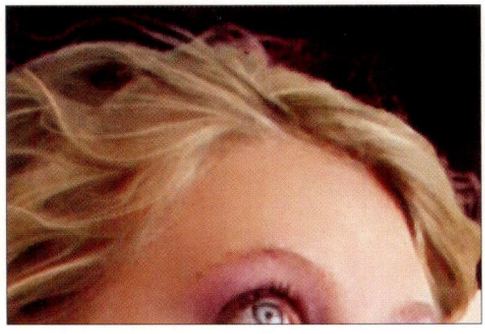
### 25: Cleaning up the hair

The hair is very damaged by the artefacts. To restore it, press 'Control-Shift-Alt-E' then load your hair selection and erase everything else. Use the 'Dust & Scratches' filter to minimise the remaining artefacts. Set 'Radius' to '2 pixels' and 'Threshold' to '13'.



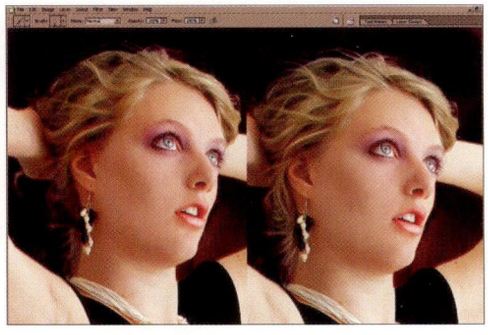

### 26: Painting new hair

To give definition, you're going to paint several new locks so, if you have a graphics tablet, now's the time to use it. Set the 'Brush' tool on '3' pixels, 'Hardness' to '70%'. In the 'Brush' palette, set 'Shape Dynamics', 'Size Jitter' to '0%', 'Fade' to '250'. Set 'Other Dynamics', 'Opacity' to 'Pen Pressure'.



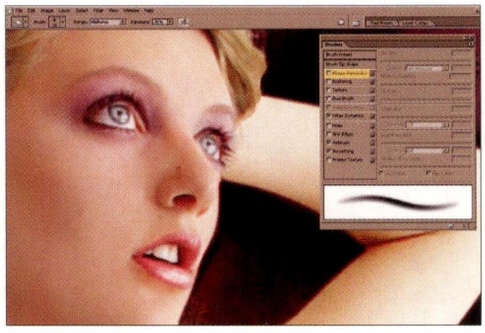
### 27: Painting locks of hair

On a new Layer, start painting the new locks. Keep your finger on the 'Alt' key to sample a new colour for each stroke. Sample the blondest area then paint without pressing too hard on your stylus. Switch between the 'Eraser' ('E') and 'Brush' ('B') tools to soften the hair when needed.



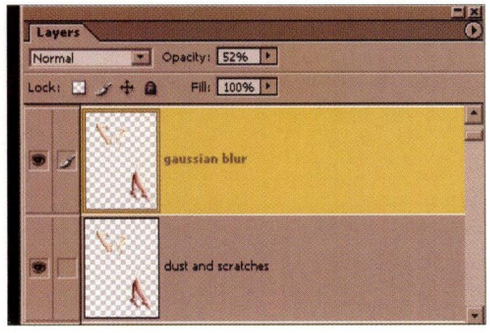
### 28: Finishing the hair

Reduce your brush size to one pixel and set the 'Hardness' to '100%'. Now, start sampling the darkest colours and paint right over of the blocky artefacts to blend them in. Then sample lighter colours to recreate individual hair strands on top of the shadows you've created.



### 29: Defining eyebrows

Use the same method to recreate eyebrows. Set the one-pixel brush to 'Shape Dynamic', 'Size' to 'Fade 17' and sample dark colours to start painting small dark hairs. Then, sample light colours and paint on top. When done, use the 'Blur' tool to soften the painted strokes.




### 30: Smoothing the skin

You've painted out artefacts and various problems on the face but the skin on the rest of the body also needs to be smoothed. To do so, press 'Control-Shift-Alt-E' then load your skin selection and erase everything else, including the face. Duplicate this Layer.

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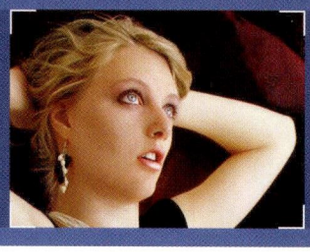
## Even out skin tones

Nowadays, you can't find a picture in a magazine in which the skin hasn't been smoothed. In this workshop, you'll find several techniques to do so. You can also use the 'Healing Brush' and 'Patch' tools to get rid of blemishes, wrinkles and other details. However, you shouldn't feel you have to remove all imperfections, depending on the end result you want. For example, if you go for a luxurious look and an elaborate ambience (as in this workshop), the nearly unreal aspect of the model will require skin that has been colour corrected and touched up substantially. However, you'll notice that in order to retain the fresh character of our model, we didn't erase everything.



■ *The extent to which you remove skin imperfections also depends on the mood and purpose of your image. If you're not sure, then try several versions and see*

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## Natural skin

If you work with a picture that has good definition and no artefact problems, you can smooth the skin by painting over it as you did in this workshop but set your Layer or Brush mode to 'Lighten'. The paint you apply will even out the skin but the lighter elements will show through, giving the skin a more natural look.

# All the tricks of the retouching trade

**You'll only need to master a few tools to start retouching photographs. Here's a quick presentation of the ones that will become an essential part of your toolbox...**

### Path Selections

Define image sections using Paths, then 'Control-Click' the thumbnail to turn them into Selections. Save them as Channels to touch them up

### The Brush tool

Most of your work here will be done with the Brush tool. Using a graphics tablet will make things much easier

### Layer Masks

Layer Masks are your friends! Whenever possible, do not erase directly on the layer, but paint things out using a Layer Mask; this way, you can always bring things back later if need be

### Adjustment Layer icon

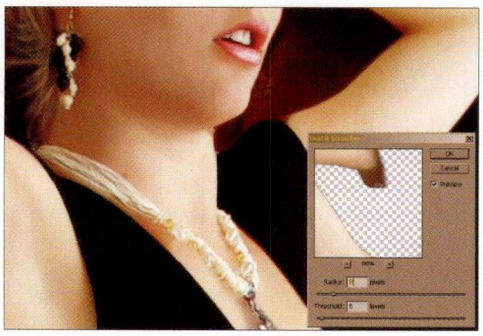
Adjustment Layers are your friends too! Being non-destructive and coming fully equipped with their own Layer Mask, they're an essential part of your retouching toolkit

### Selections as Channels

A Selection you've created with a Path won't always fit perfectly. Once saved as a Channel, test your Selection and make changes with Quick Mask

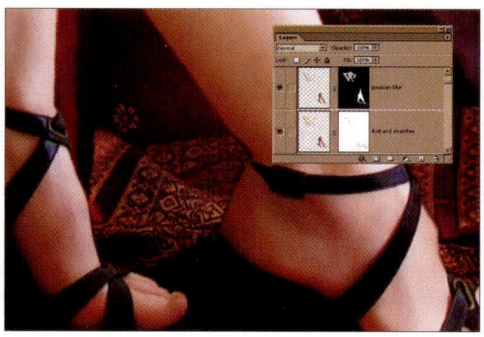
### Navigator Window

On this kind of project, you'll zoom in and out as well as pan over the image. The Navigator should save you precious time



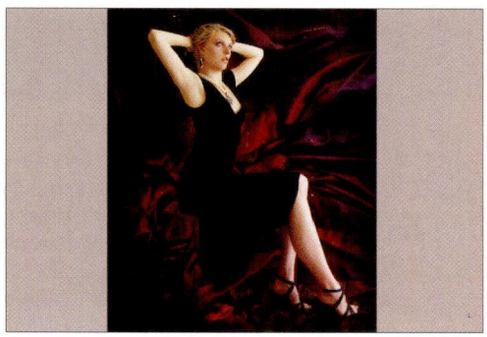
## 31: Smoothing with Filters

On the top Layer, apply a '5'-pixel 'Gaussian Blur'. On the second one, apply a 'Dust & Scratches' filter with 'Radius' of '8', 'Threshold' of '6'. Set the Layers' opacity to about '50%'. Add a Layer Mask based on the skin selection to the 'Gaussian Blur' Layer so that it does not spill out onto other areas.



## 32: Painting out the effect

The smoothing effect has created some strange artefacts, such as here around the shoe straps. Using Layer Masks, paint them out where needed. Notice that the calves have more grain than the arms. Reduce the effect on the arms by filling the Layer Mask arm area with a light grey.



## 33: Last touches

Scrutinise your image once more and correct all the little mismatches. You can create a new layer and use the 'Clone Stamp' tool set on 'Use All Layers' to correct small problems. Now forget this image for a day or two, then come back to it with a fresh eye to see if it needs any last corrections.

[ writer: Mark Shufflebottom | hardware: Apple iMac G4 | software: Adobe Photoshop CS ]

# CREATE TEXTURES IN PHOTOSHOP

## Learn how to create photorealistic textures for your projects using only the filters and styles that you have available to you in Photoshop

*It's hard to believe, but every element of this logo was created using just a range of Photoshop filters and styles – no stone, wood or water was harmed in the making of this workshop!*

**ON THE CD**

*displace.psd*
*high-low.psd*
*logo.psd*
*stone.psd*
*blobs.psd*
*wood.psd*
*noise-displace.psd*
*logo-finished.psd*

**Photoshop is without doubt the best piece of software to use for tinkering with your images. Its abilities go way beyond retouching your digital snaps and it's long been used by graphic artists the world over to create original artwork without so much as drawing, scanning or using a digital photo.** That's basically the idea behind this tutorial. We are going to create some original textures using only the functions and features that you can find inside Photoshop itself.

Obviously, if you have a photo of stone, water, metal or wood to hand then you would probably choose to use that, but whipping up a quick texture is great if you want to add a special effect to something like a logo. Because these textures are created using filters and effects within Photoshop this is also a great tutorial if you want to explore the program and pick up a bit more in-depth knowledge. You will see how many of the filters and effects can be used together, and how to work with Clipping Masks and make the most of them.

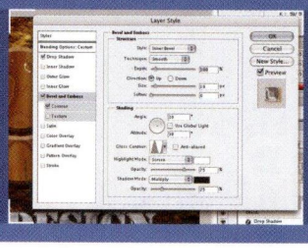
If you've never come across the Layer Styles before then this workshop will also show you how to get some great results with them. Most designers use them as quick ways to add Drop Shadows and Bevels to graphics, but with a bit of useful tweaking you will find it easy to produce shiny metal and transparent water droplets. Another useful concept that you'll be introduced to is the Displacement Map.

Basically, a Displacement Map uses a black and white image to produce an imaginary altitude. Dark areas appear shallow while white areas appear to be raised. This is particularly useful for creating the reflections on the water and the roughness of the stone. All in all, this tutorial will give you tips about creating your own textures and integrating them into your work – so enjoy it, and then get creative!

CREATIVEPRIMER

## Get stylish

Layer Styles are the building blocks for many of the effects used in this tutorial and offer some really flexible results. What's so amazing is that they automatically apply themselves to the shape you have created because they use only the filled area of the layer. By using many different styles and settings, and the help of other Photoshop filters, complex effects can be built up. Most of the best effects come from playing around with different styles until you get the desired result, although sometimes some undesired effects can really amaze you.



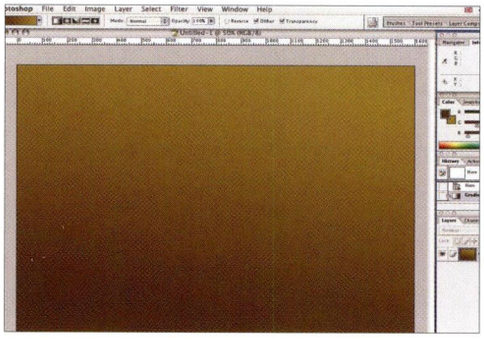
■ *Get creative with Layer Styles – the building blocks of many special effects. It's also another aspect of Photoshop that it's crucial to have under your belt to improve*

YOURGUIDE

**MARK SHUFFLEBOTTOM** is a regular contributor to a variety of magazines, including *Web Designer* and, of course, *DCA*. You can also find Mark teaching on the BA (Hons) Interactive Media course at Bournemouth University. Before he took to the academic world, Mark used to be a magazine designer – so he's a dab hand when it comes to Photoshop!

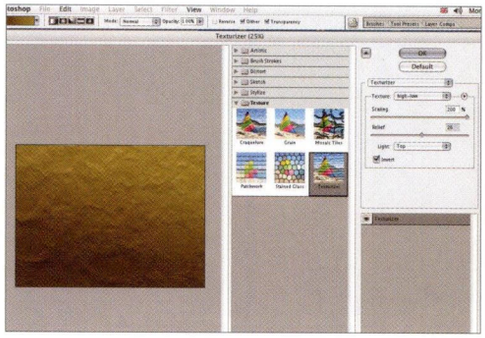
# **Step-by-step:** create photorealistic textures

Created without using a single photograph, could these Photoshop textures be even better than the real thing?



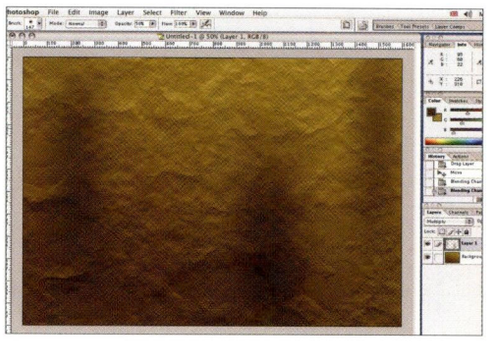
## 1: Creating the stone texture

Open Photoshop CS and create a new document that's '1600 x 1200' pixels. Change the foreground colour to dark brown and the background colour to light brown, then use the 'Gradient' tool set to 'Foreground to Background' to create a coloured fill on the document.



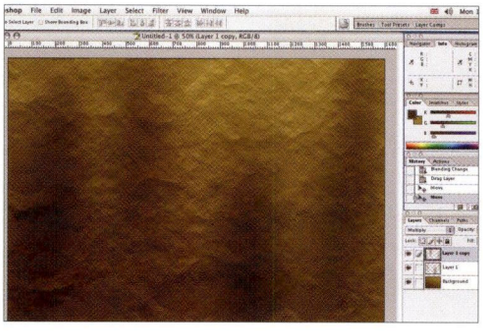
## 2: Adding a texture

Choose 'Texture and Texturizer' from the 'Filter' menu. Click the right arrow button near the 'Texture' option and load 'high-low.jpg' from the CD (or see the panel on page 38). Set the scaling to fill the document and increase the relief to '26'. Make sure the lighting is set to 'Top' then click 'OK' to apply.



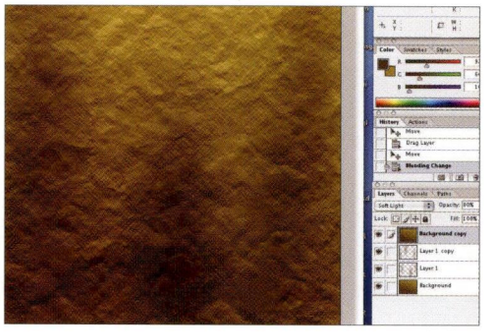
## 3: Dark patches

Choose a soft-edge paintbrush that appeals to you and draw some dark patches on the screen. Just be creative, remembering you can 'Undo' anything bad. Use 'Gaussian Blur' and 'Motion Blur' to soften it. Now change the 'Blending Mode' of this layer to 'Multiply', which will darken the colour.



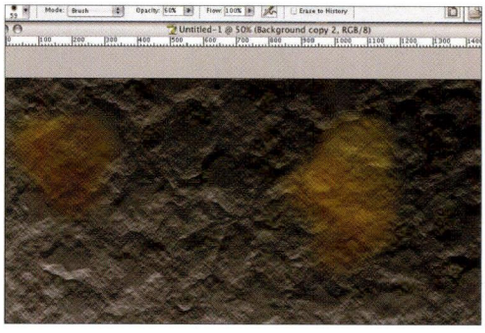
## 4: More dark patches

Duplicate the patch Layer by dragging the Layer to the 'New Layer' icon in the 'Layers' palette. Go to the 'Edit' menu and choose 'Transform' and then 'Rotate 180°'. Now position this Layer as shown above, reducing its opacity to '80%'. Do tweak this setting to suit if you want to.



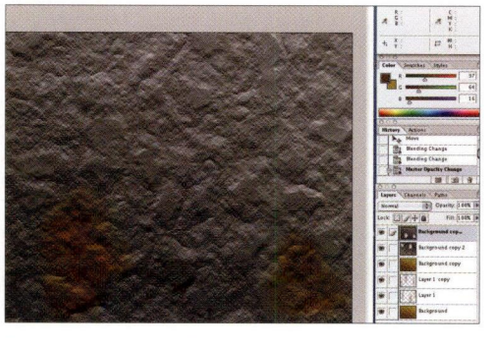
## 5: More texture

Create another blend (as in Step One) and apply the 'Texturizer' filter from the 'Texture' option under the 'Filter' menu. This time make the scaling smaller so that there is more detail in the image. Change the Blending Mode to 'Soft Light' and the opacity to '80%'.



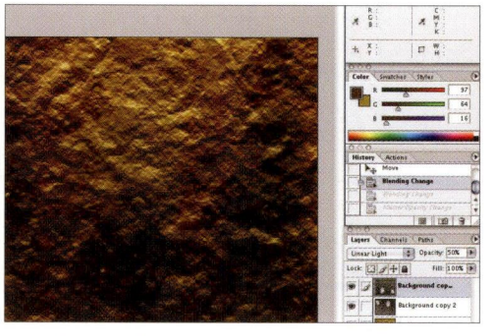
## 6: Copy and rotate

Copy the top texture layer and rotate it '180°' from the 'Edit' and 'Transform' menu. Choose 'Image', 'Adjustments' then 'Desaturate'. Select the 'Eraser' tool and change the opacity to '60%'and then erase the areas on the screen as shown above. Experiment until you're satisfied.



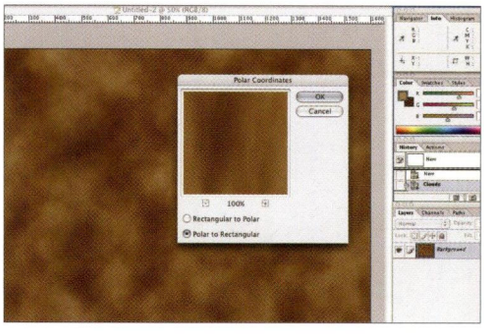
## 7: Rotate again

Change the Blending Mode of this Layer to 'Overlay'. This should now produce some nice red colour in the stone. Copy the Layer by dragging it to the 'New layer' icon in the 'Layers' palette and rotate it '180°' from the 'Edit' and 'Transform' menu.



## 8: Blend the Layer

Now reduce the opacity to '50%' and change the Blending Mode to 'Linear Light', which should give a nice rock look. If you want to save this, save it as 'stone.psd'. Now go to the 'Layer' menu and flatten the image as a background to work on for the other textures.




## 9: Wood be good

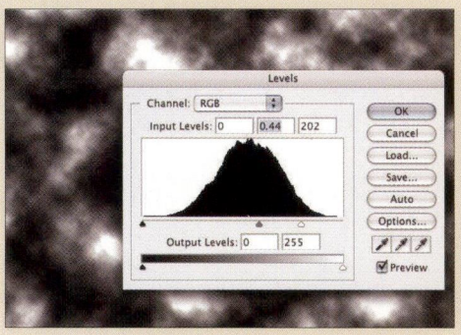
We are going to make the wood texture now so create a new document of '1600 x 1200' pixels. Use a light brown foreground colour and dark brown background colour, then choose 'Filter', 'Render', 'Clouds'. Then choose 'Filter', then 'Distort' and 'Polar Coordinates'.

# CREATE TEXTURES IN PHOTOSHOP

## Set in stone

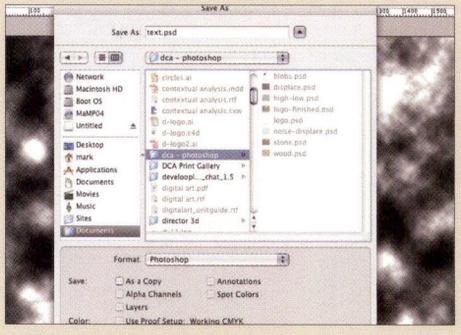
### Displacement Map

Creating the Displacement Map that was used to make the texture for the stone was really easy. Start off with a new document of '1600 x 1200' pixels. Press 'D' on the keyboard to load the default colours then render clouds onto the document.




### Increase the Levels

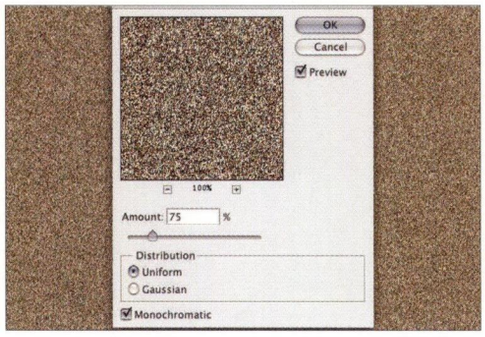
Increasing the black content in the image will create higher and lower peaks. Remember that black areas are low while white areas are high when used as a Displacement Map. The Levels are accessed through the 'Image', 'Adjustment' and 'Levels' menu.




### Save the image

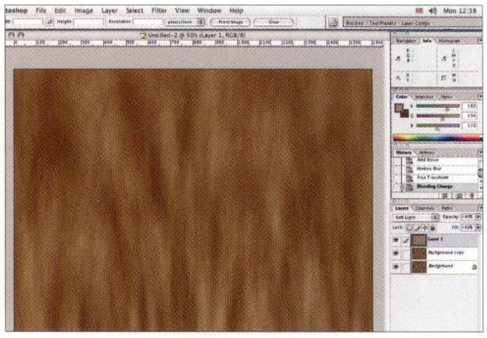
The image needs to be saved as a '.PSD' file so make sure you select 'Photoshop' as the Save Format. You can name the image anything you like. All you need to do now is point to this file when using the 'Texturizer' filter for creating your own custom texture.

## Continued...




### 10: Scale the effect

Duplicate the Layer and from the 'Edit', 'Transform' menu choose 'Scale', then drag the top off the screen to get just the streak effect. Create a new Layer and fill it with the foreground colour. From the 'Filter' menu choose 'Noise', 'Add Noise'. Copy the details as shown above.



### 11: Add motion

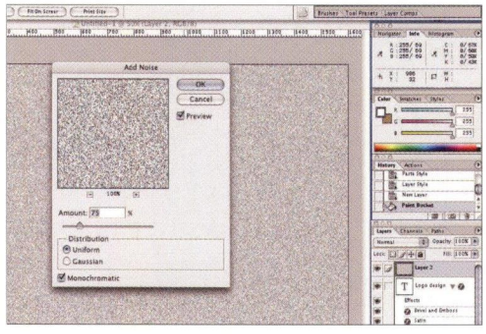
Add a 'Motion Blur' of '45' pixels and change the angle to '90°' then click 'OK'. From the 'Edit', 'Transform' menu choose 'Scale' and increase the size vertically to lose the dodgy edge pixels. Now change the Blending Mode to 'Soft Light' so that it looks like wood grain.

### 15: Blend it together

Change the original wavy lines layer to '40%' opacity. Duplicate the copy of the background layer and position it above the other Layers. Change the Blending Mode to 'Soft Light' with '80%' opacity. Save this file as 'wood.psd', then flatten the image.

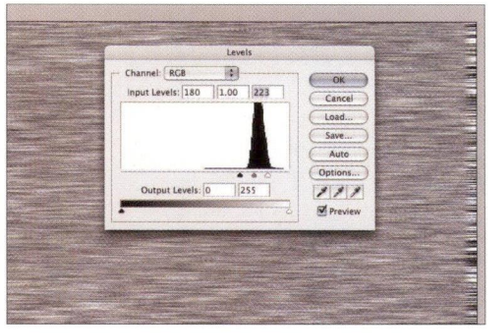
### 16: Add a logo

From the cover CD open the file 'logo.psd' and drag it onto the wood document. From the 'Select' menu choose 'Load Selection' and load this Layer's transparency. Now select the background Layer and press 'Control-C' to copy the selection.




### 20: Add a Stroke

Click on the 'Stroke' option and add a five-pixel Stroke, positioned to outside with a blue/grey colour, then click 'OK'. Add a new Layer and fill it with white then go to 'Filter', 'Noise', 'Add Noise'. Add 75% 'Uniform Noise', set to 'Monochromatic', and click 'OK'.



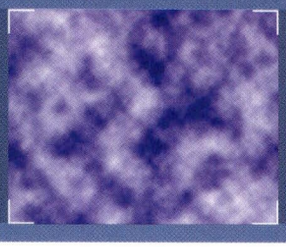

### 21: A Motion Blur

Add an 80-pixel Motion Blur set to an angle of '0°' then click 'OK'. Press 'Control-L' to edit the levels. Drag in the black slider and the white slider to add more emphasis as shown, then click 'OK'. This should now have increased the intensity of the lines.

CREATIVEPRIMER

## Clouding the issue

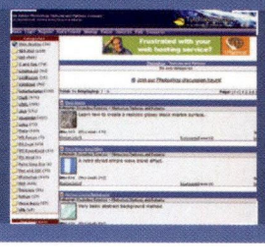
The 'Clouds' filter in Photoshop is one of the most useful. It's perfect for achieving natural- or dirty-looking graphics. The filter was the basis of the wood texture and it was also used to create the Displacement Map for the stone texture. It works by using the foreground and background colours to generate clouds. Try changing colours for odd results or even use the 'Difference Clouds' filter to produce clouds formed from colours opposite those selected on the Color Wheel.

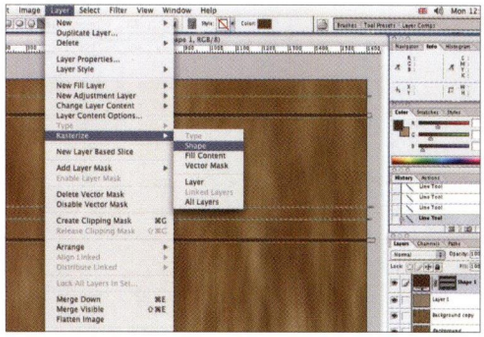


*The 'Clouds' filter will help you create many styles of special effect. It's always worth experimenting with the filter and getting used to it so you can produce anything*

WEBRESOURCES

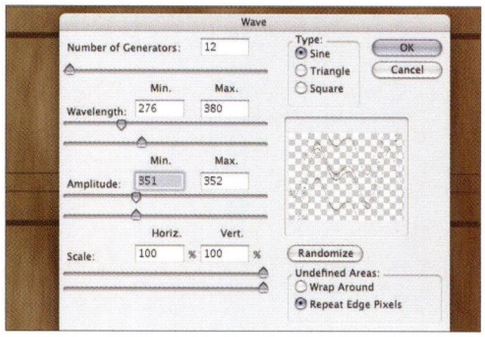
If you'd like to know more about creating textures, special effects or patterns for your artwork, then you'll find loads of help at Tutorialized (**www.tutorialized.com**). This site contains much information about the kind of effect you've seen here. There are many different variations on what we've done to be tried and tested!





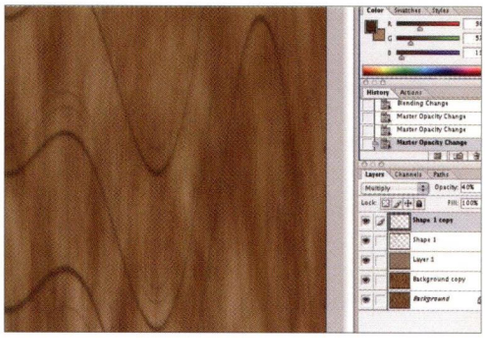

## 12: Add some lines

Create a new Layer and add dark brown lines of varying widths with the 'Vector Shape' tool. If you hold down 'Shift' then it will make sure the lines are straight and add them to the same Layer. When done, go the 'Layer' menu and choose 'Rasterize' and then 'Shape'.



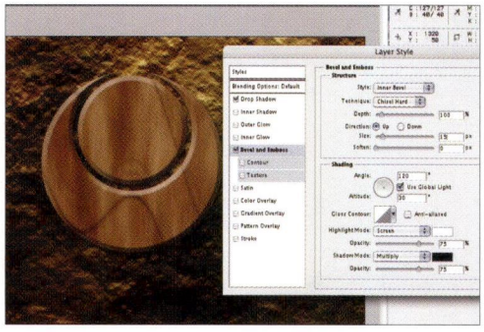

## 13: Distort the lines

Use the 'Crop' tool to crop the layer snug to the document size. Now go to the 'Filter' menu and choose 'Distort' and 'Wave'. Copy the details as shown above and then click 'OK'. Go to the 'Distort' filter and choose 'Display add 5' as both horizontal and vertical scale.



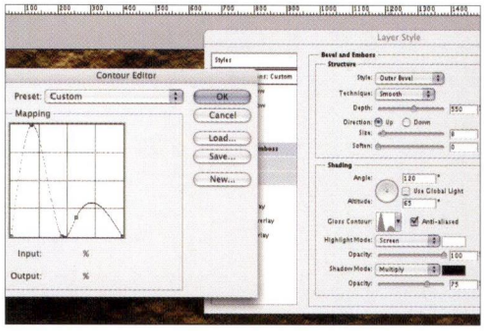
## 14: Load the Displacement

Once you click 'OK' you will be prompted to load the Displacement Map. Browse to the cover CD and load 'noise-display.psd'. Copy this Layer and add a 'Gaussian Blur' of six pixels. Change the Blending Mode to 'Multiply' and the opacity to '40%'.



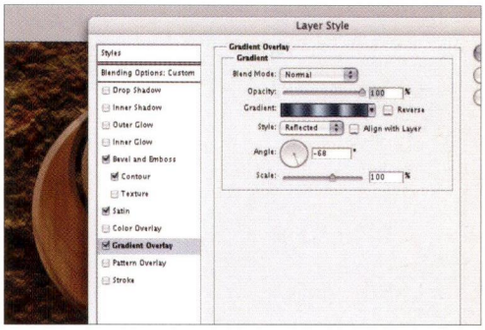

## 17: Chisel the logo

Go to the stone document and press 'Control-V' to paste in the logo. Double-click the Layer to access the Layer Style and add a 10-pixel Drop Shadow with the opacity reduced to '60%'. Switch to 'Bevel and Emboss' and change the Bevel to 'Chisel Hard' at 15 pixels.



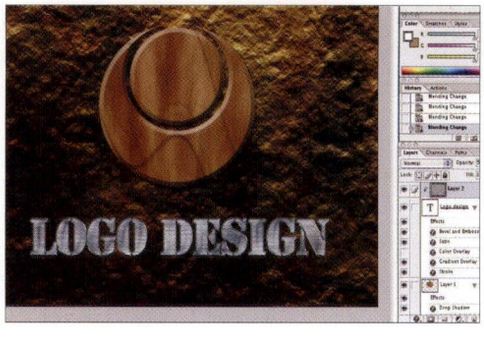

## 18: Add text

Add some text under the logo with the 'Text' tool, then double-click the Layer to edit the Layer Style. Enter the details you want and edit the 'Gloss Contour' by clicking on it. Click on the 'Contour' option and change the contour to 'Cone-Inverted' and increase the range to '100%'.



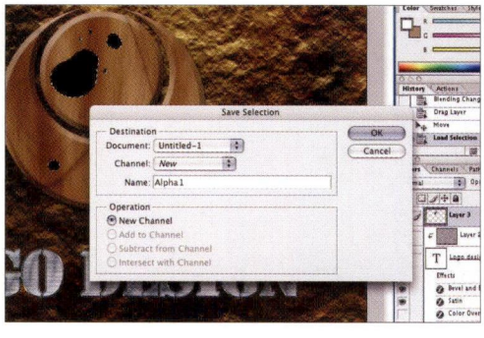

## 19: Gloss it up

Click on the 'Satin' option and change the Blend Mode to 'Screen' with white as the colour on '100%' opacity. The angle should be '135' with distance and size set to '26'. The contour should be rounded steps. Click on the 'Gradient Overlay' option and fill in as shown.



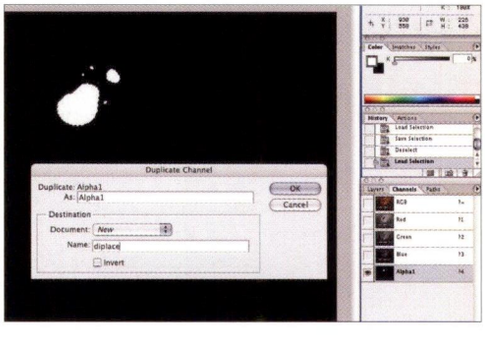

## 22: Clipping Mask

Go to the 'Layer' menu and select 'Create Clipping Mask'. You should only be able to see this Layer where the Text Layer is below it. Reduce the opacity of this layer to '50%', which will help the text to look more like authentic brushed steel, which is what we want to see.




## 23: Creating water

From the cover CD open the image 'blobs.psd' and drag the blobs over to the stone composition. From the 'Select' menu choose 'Load Selection' and choose the current Layer's opacity. Now from the same menu choose 'Save Selection' and save it as 'Alpha1'.

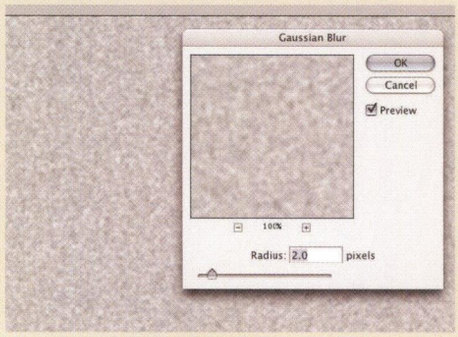



## 24: Create a Displacement Map

Click on the 'Channels' palette and 'Right-Click' on the Channel 'Alpha1'. Select 'Copy To New Channel'. When the pop-up window opens change the destination to a new document and name it 'displace', then click 'OK'. Add a six-pixel 'Gaussian Blur' to the new document.

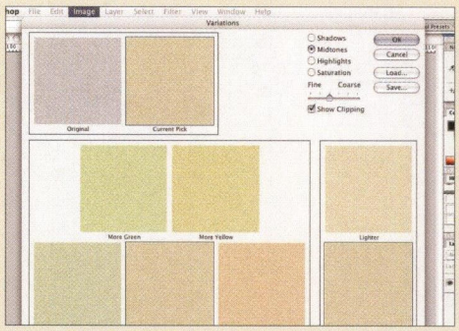
# CREATE TEXTURES IN PHOTOSHOP

## Create your own paper perfection



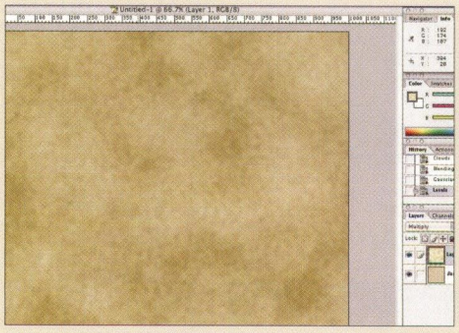

### A solid base

Creating a distressed paper look is easy in Photoshop. First create a new document of '1000 x 1000' pixels. From the 'Filter' menu choose 'Noise', 'Add Noise'. In the pop-up window add '50%' Noise and set this to 'Monochromatic'. Add a 2.5-pixel 'Gaussian Blur' from the 'Filter', 'Blur' menu.




### Add colour

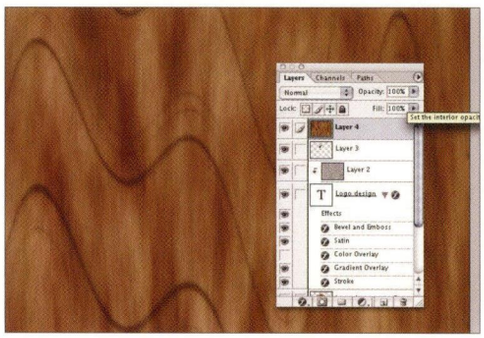
From the 'Image' menu, choose 'Adjustments', 'Variations'. Add a little yellow and a little red to the image to make it look slightly sepia-toned then click 'OK'. The 'Variations' are really useful for checking out colour changes. Click on the original image at any time to revert back and start again.



### Those clouds again

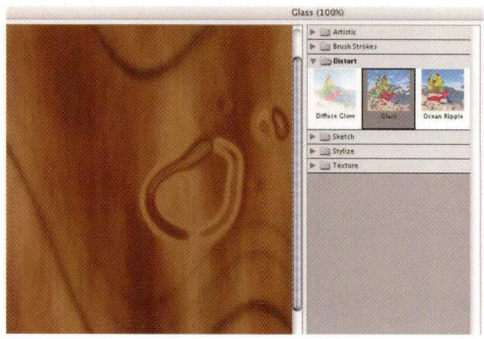
Now create a new Layer and make your foreground colour sepia and your background white. From the 'Filter' menu choose 'Render', 'Clouds'. Change the Blending Mode of the layer to 'Multiply' and '50%' opacity. You should now have some authentic antique paper.

## Continued...



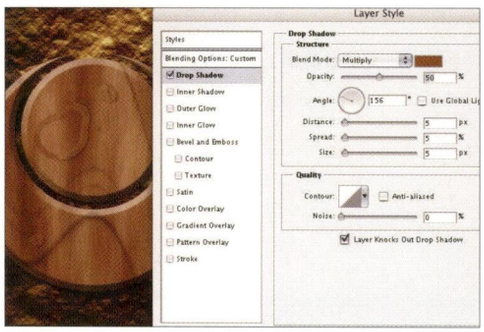

### 25: Save document

Save the document as 'displace.psd'. Do not use the one from the CD as the file has to be exact to your position. Close this document. Deselect the selection back in the stone document and click back on the top Layer. Drag across the wood image from the wood document.




### 26: Displace the image

Add a two-pixel 'Gaussian Blur' to the top wood Layer then choose 'Filter', 'Distort' and 'Glass'. Fill the details in as shown and load the 'displace.psd' from the previous step as the texture, then click 'OK' to apply. From the 'Layer' menu choose 'Create Clipping Mask'.

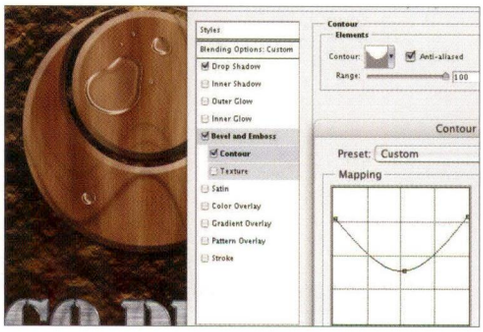



### 27: Adding highlights

With this top Layer set to a 'Clipping Mask' it should look a little like water, but not enough, so select the text Layer and 'Double-Click' it in the 'Layers' palette to edit the Layer Style. Add a Drop Shadow, using a colour from the wood as shown above.

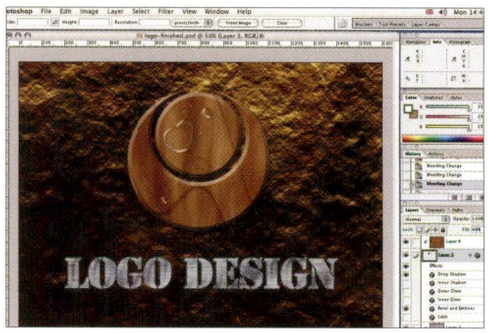
### 28: Getting the highlights

Obviously, glass looks a little more wet, so to achieve this effect we need highlights. Click on the 'Bevel and Emboss' category. Use an 'Inner Bevel' set to 'Smooth' as the technique. Make sure the 'Angle' and 'Altitude' are set to '30°' with the contour set to 'Ring'.




### 29: Adding the contour

Click on 'Contour' and change the contour to 'Cone – Inverted', then click the icon to edit it as shown above. Click 'OK' in the editor then click 'Blending Options' in the 'Styles' categories. Change the 'Fill Opacity' to '48%' and select 'Blend Interior Effects as Group'.




### 30: Save the image

You have now completed all the textures: liquid, metal, wood and stone. You can save this image as 'logo.psd'. Using these techniques it is very easy to create more textures or change them so that they are more useful to you in your own projects. We've got you started, now just experiment!

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Issue Ten On Sale AUG 26

[ writer: **Ross Andrews** | hardware: **iMac G4 17"** | software: **Adobe Photoshop CS** ]

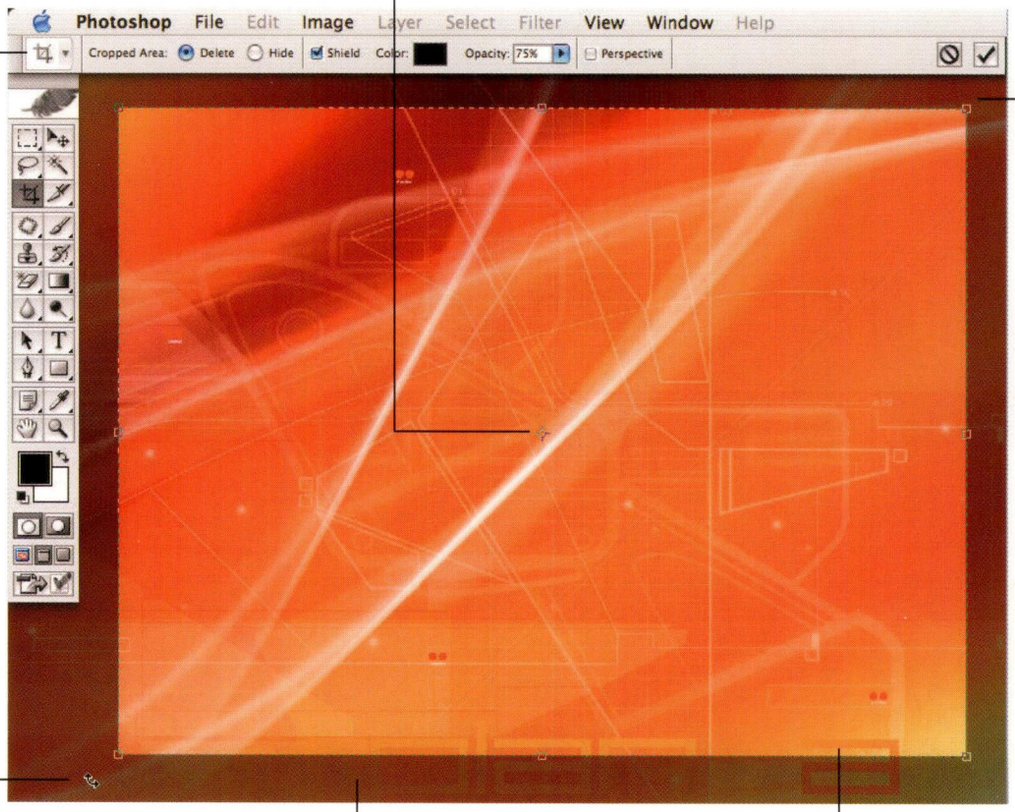
# USING PHOTOSHOP'S CROP TOOL

## In part five of our regular series covering Photoshop's toolbar, we focus on the deceptively simple Crop tool

### Options Bar
Before you draw the cropping area this bar gives you options to resample the image. Once you've drawn the rectangle it changes to a second set of options

### Centre Point
Click on this small target and drag it around to change the point around which the image will rotate

### Handles
Grab these small squares along the edge of the cropping rectangle to change the dimensions of the area to be trimmed


Photoshop File Edit Image Layer Select Filter View Window Help
Cropped Area: Delete Hide Shield Color: Opacity: 75% Perspective

### Rotate Cursor
Move the mouse cursor into the Shield area and it changes to reflect the Crop tool's ability to rotate the image as well as cut it down to size

### Shield
This dimmed-out area allows you to preview the area that is going to be trimmed off by the crop

### Cropping rectangle
Everything inside this dotted line – that isn't dimmed out – is going to survive the crop intact

**At first glance, the fifth tool in the Photoshop CS toolbar – the Crop tool – performs one simple function: it cuts an image down to a size you specify.** So what makes it different from using a Rectangular Marquee and then choosing 'Crop' from the 'Image' menu? A quick exploration of its features reveals much more than just the ability to trim an image and in fact you can cut, rotate, resample and enlarge images, or even match the dimensions of two images for easy composition.

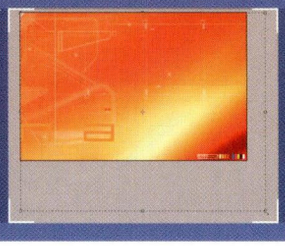
Once learnt, you will soon find the Crop tool essential for both technical and creative uses. Cropping can be vital for preparing an image for print, so that it fits a particular paper size, or for creating graphics for the Web. Before you even start to think about image compression, one of the easiest ways to cut down image size is to reduce the canvas size. Even a white background around an object or image contains pixels – crop those off and the file size will drop.

Creatively, cropping is one of the quickest and easiest ways to change the focus and feel of an image. Simply by cropping distracting elements around the edge of a picture you can emphasise the main focal point. By creating space at one side of an image you can give a portrait 'looking room' and allow a composition space to breathe, or you can cut space and enhance a feeling of claustrophobia.

The main benefit of the Crop tool is that it lets you experiment with different crops before you commit – you can try odd aspect ratios, tighter compositions or dramatic rotations, though you may have to twist your head to preview the result. Maybe in a future upgrade Adobe will keep the previewed area straight and rotate the canvas around it. ■

## Crop the canvas bigger

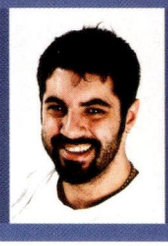
Yes, you read that correctly – you can use the Crop tool to make the canvas bigger, saving you a trip to the 'Canvas Size' menu command and allowing you to accurately judge the enlargement instead of estimating dimensions. Start by dragging the cropping rectangle from one corner of the image to the other. Now grab a handle and drag it outside the image area (it helps if you use the 'F' key to remove the window frame). Hit the 'Return' key, or click the 'Commit' tick, when you get to the desired size and the extra canvas area will appear.



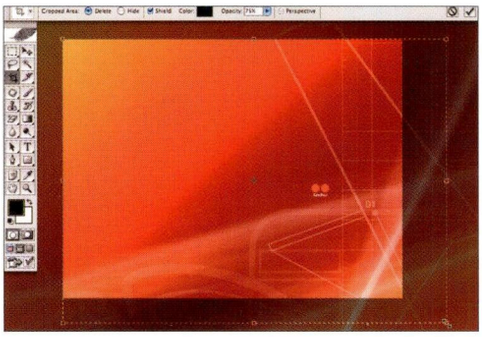
*Cropping an image bigger may seem like a silly idea, but it's the perfect way to achieve the Canvas size you require visually, and without getting bogged down in figures*

YOURGUIDE

**ROSS ANDREWS** has been a Photoshop enthusiast since the first time he got his hands on version 2.5 way back in 1993. As Group Art Editor at Highbury Entertainment, Ross has been putting his Photoshop skills to good use over a wide range of magazines. Being an avid Mac fan, the thing Ross likes best about Photoshop CS is that it works in OS X.

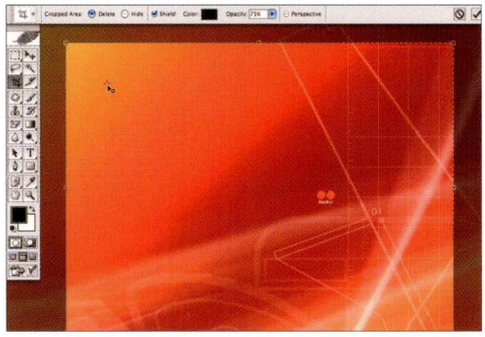


# The Cropping Shield



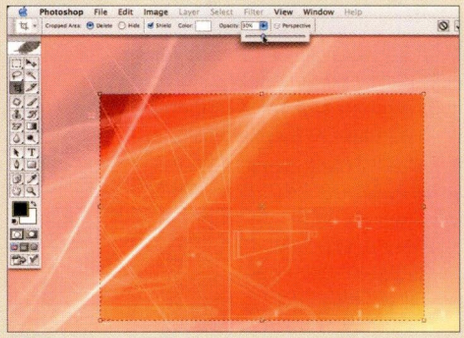
### 1: Cropping basics

Click the 'Crop' tool in one corner of your image and drag the tool diagonally across the canvas, releasing the mouse button to select the rough area you want to retain. Once the crop is set, fine-tune it by clicking and dragging one of the handles. Hit 'Return' or click the 'Commit' tick to crop the image.



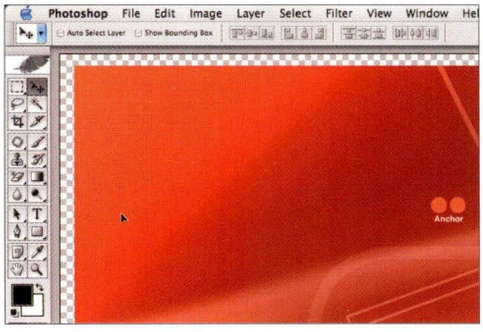
### 2: Crop and rotate

Drag to create a new crop area, then position the cursor on the 'Shield' area outside the crop and away from any handles. You'll notice it turns into a curved arrow. When the cursor is in this mode you can click and drag to rotate the cropped area – this can be perfect for one-step composition fixes.



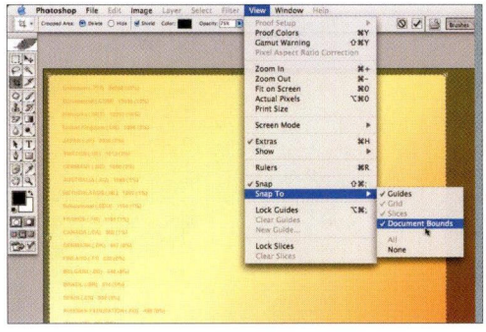
### Crop Shield

The 'Cropping Shield' is the dimmed area outside the area to be cropped, not the area protected (or 'shielded') from the crop. You can edit the Shield's appearance in the 'Options' bar once you've set the crop; use the check box to switch it on or off, or change the colour or opacity.



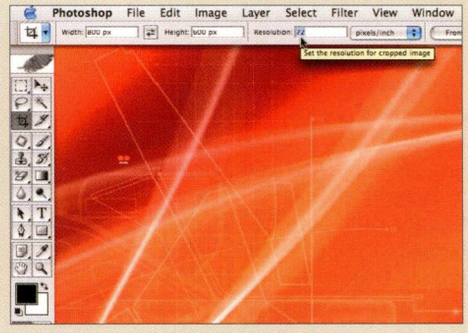

### 3: Delete or hide?

The Crop tool deletes everything outside the crop area by default, making it difficult if you want change your mind later. If this sounds a little scary, select the 'Hide' command from the Options bar. The Crop tool will mask everything outside the crop area so you can move or scale it back into view.




### 4: Snap to it

If you only want to crop a thin edge of an image then one of the most annoying characteristics of the 'Crop' tool is its habit of jumping straight to the border of an image every time a handle gets anywhere near the edge. To switch this off, head to the 'View' menu and turn off 'Snap To', 'Document Bounds'.

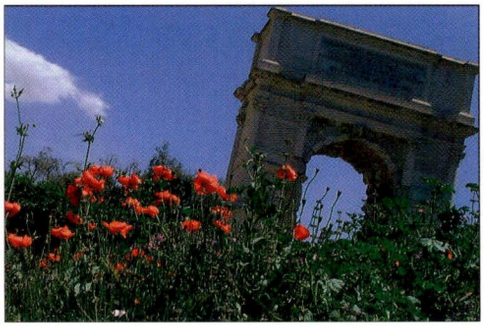



### Resampling your image

The resampling options – 'Width', 'Height' and 'Resolution' – can save you a trip to the 'Image Size' dialog box. They let you change the dimensions and resolution of the image while cropping it. Set the width, height and resolution then drag the crop area, which will follow the right aspect ratio.

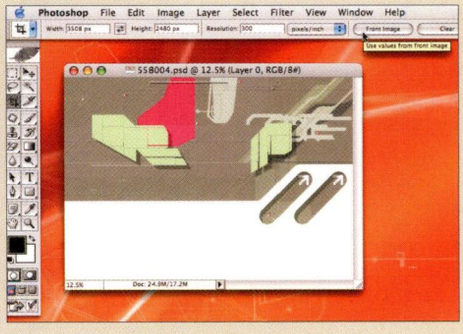
### 5: Play bad crop...

Digital photography is one field where the Crop tool comes into its own. An itchy shutter finger can turn what should be a perfect picture into something that falls just short of the mark. In the original of this image the focus is all over the place, with elements creeping in from the sides and no sense of drama.



### 6: ... good crop

By heavily cropping the image and taking advantage of the Crop tool's rotating abilities, it's easy to simplify and add drama to the image.Do this by cropping off the foreground, losing the distracting elements on each side and increasing the rotation to add interest to the finished article.


Photoshop File Edit Image Layer Select Filter View Window Help
Front Image
Use values from front image
SS8004.psd @ 12.5% (Layer 0, RGB/8#)

### Front Image

The 'Front Image' button will set the crop dimensions to that of the image in the front-most image. Bring your background image to the front and hit the button, then switch to the second image and use 'Crop' to trim it to the same size. You can then drag it over to the first document.

[ writer: Ross Andrews | hardware: iMac G4 17" | software: Adobe Photoshop CS ]

# CREATE A STUDIO BACKGROUND

## Forget complex lighting, backing sheets and tricky F-stops. Instead, why not mimic the professionalism of a studio with Photoshop's Gradient tool?

**Anybody who regularly looks at magazines will probably have noticed the effort taken to make products look more interesting by photographing them against imaginatively coloured and lit backgrounds.** While this takes a great deal of talent – and an awful lot of time – to achieve in the studio, it's really quite easy to fake in Photoshop, and requires nothing more than a bit of a play with the Gradient tool.

The Gradient tool is that little rectangle filled with a black-to-white blend that sits in the third row of the brushes section of the toolbar, although even experts will still click the 'Rectangle' tool by mistake, since they look similar enough for it to be confusing at a quick glance. To be sure, you could try hitting 'G' for the Gradient tool shortcut.

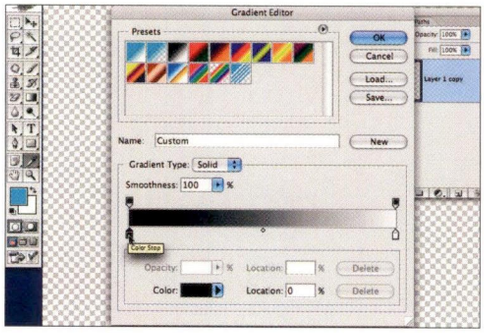
Once you have the Gradient tool selected then you can adjust the effect you will get from a few settings in the Options bar. These include colour, type of gradient (Linear, Radial, Angled, Reflected or Diamond) and the apply mode. Once set, you then just click and drag the Gradient tool across the canvas.

Although the examples used in these steps rely on simple gradients from one colour to another, you can easily add more colour stops in between by opening the 'Gradient Editor' (as described in Step One) and then clicking anywhere on the example gradient to add more stops, setting their colour using the techniques explained in Step Two.

Once you've created your perfect photo studio background, it doesn't have to be something boring you put in front of it, so see page 30 for some ideas. ■

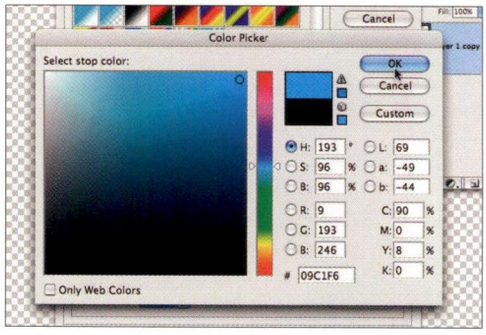
**Step-by-step:** create your own digital studio in photoshop

Use gradients to create a surface, background and lighting and just think what you could achieve!



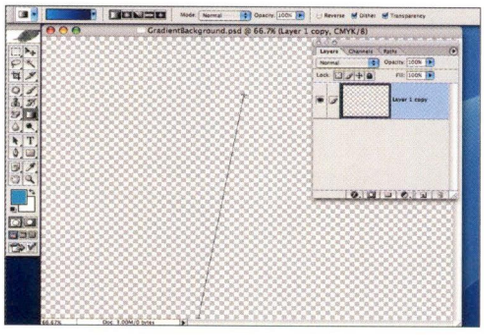

### 1: Create your gradient

Starting with an empty canvas, select the 'Gradient' tool and then click the example gradient in the 'Options' bar to edit the colours. In the window that appears click the first colour stop below the gradient preview to select it and then click the colour sample at the bottom to pick a new hue.



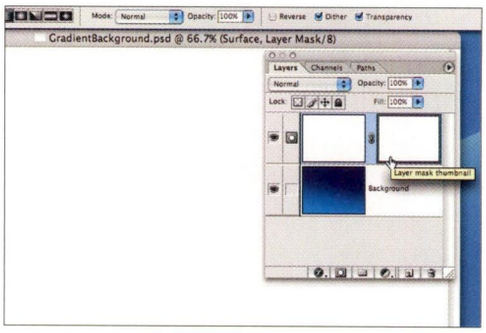

### 2: Pick a colour

In the 'Color Picker' window that appears, use the slider to choose a hue. Now click in the main window to set the brightness and saturation, or you could type numbers in for the various colours. Click 'OK' to set the colour and then repeat for the colour stop at the other end of the gradient.



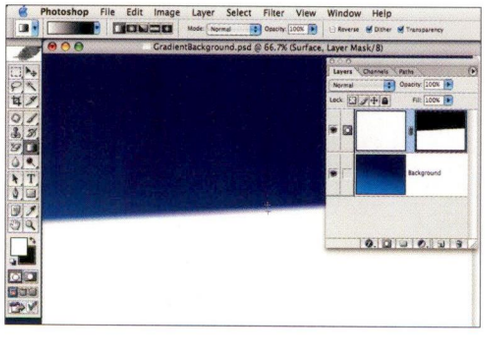

### 3: Draw the line

Now apply the gradient to the canvas. Check it is set to a 'Linear' blend (the first blend button in the 'Options' bar) and then simply click in the top part of the canvas and drag down at a slight angle. The gradient will follow this line. If you're not happy with the result, click and drag again.



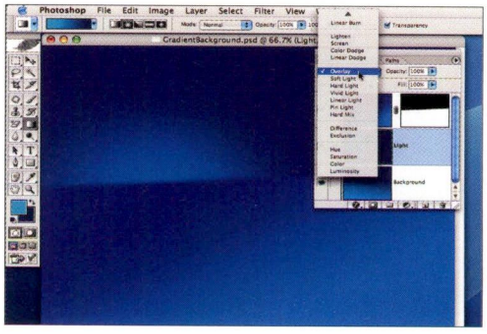

### 4: Start on the surface

This gradient will form your backdrop, so now it's time to start on the surface. Create a new layer and fill it with any contrasting colour. From the 'Layer' menu choose 'Add Layer Mask', 'Reveal All'. The only noticeable change will be a Layer Mask thumbnail appearing in your 'Layer' palette.




### 5: Edit the Layer Mask

To create the back edge of the surface add a simple black-to-white linear gradient across the middle of the Layer Mask, dragging the gradient line only a short distance to create a soft, feathered edge. You can change this edge as often as you like and at any time you care to.




### 6: A few more gradients...

Switch from the Layer Mask by clicking the Layer thumbnail next to it, and then create a coloured gradient across the layer to colour the surface. To add a highlight on the backdrop create a layer below the surface, add a bright-centred circular blend and play with the 'Layer Apply' modes.

[ writer: Ross Andrews | hardware: iMac G4 17" | software: Adobe Photoshop CS ]

# ADD REFLECTIONS AND SHADOWS

## With these quick tricks it's easy to fake reflections or to create new shadows in Photoshop – and you can do it all in just a few minutes too

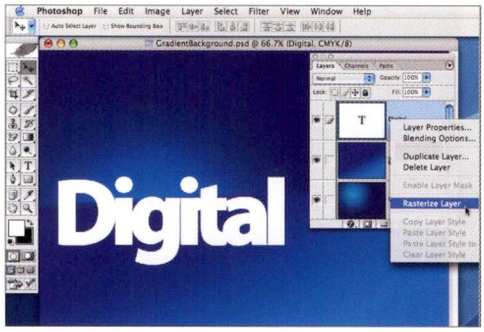
**Continuing from where our guide to Gradient backgrounds left off (see page 44), another effect that usually involves a great deal of studio time and expertise is shooting an object on a shiny surface to give a clear reflection.** The technique requires the correct materials (usually a very clean sheet of coloured Perspex), careful lighting so that the lights aren't reflected in the object, and a very low field of view. The good news is that not only can this effect be easily faked in Photoshop, but the same techniques also allow you to add reflections to elements that have never even sat before a camera lens, such as logos, pictures and, in this example, a short piece of text.

Practising the simple steps outlined here will give you a good idea of how easy it is to fake reflections and add shadows to a simple object on a single plane. Adding a reflection for a more complex 3D object is a little more complicated, as you'd have to split up each plane onto a separate layer and individually free-transform the sides to match. After that it's the same techniques that are outlined in this guide. Once you've mastered reflections, it's even easier to add drop shadows that follow the perspective of the image; the technique is the same as for a reflection, you simply free-transform backwards.

All of these effects can be creatively enhanced with different colours and 'Layer Apply' modes resulting in either more realistic or more creative results. As with most things in Photoshop, the key to the whole project is a healthy dose of experimentation on your part. ■

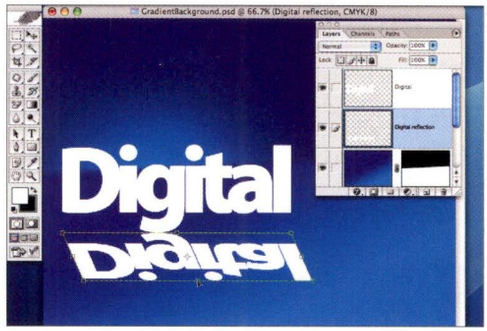
**Step-by-step:** give your text realistic reflections and shadows

Follow these steps and you'll be able to make text look like it physically exists in the space



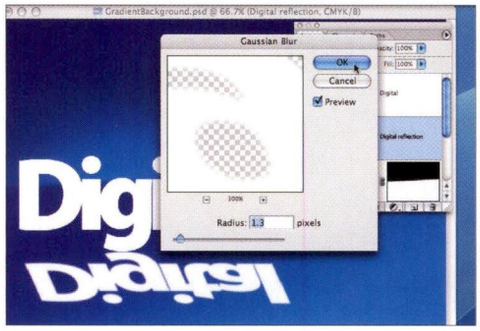

### 1: Create the text

Use the 'Type' tool to create a text layer and enter a word or two, then format it. 'Control-Click' this layer (or use the 'Palette' menu) and rasterize it for more flexibility. Duplicate the layer, either from one of the menus, or by dragging it to the 'New Layer' button at the bottom of the palette.



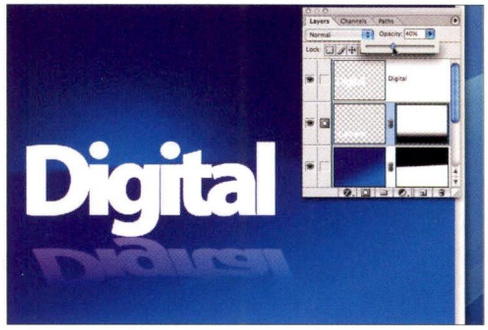

### 2: Free Transform

Switch to the lower layer of the duplicates and select 'Free Transform' from the 'Edit' menu. A bounding rectangle will appear around the text. Hold down the 'Option' key, click on the top-centre handle and drag it down past the bottom of the text and to the right, as shown above. Hit 'Return'.



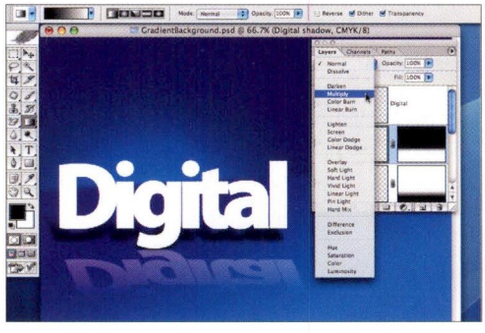

### 3: Gaussian Blur

To soften the reflection (and add a little realism), give the transformed text layer a slight 'Gaussian Blur'. You'll find this in the 'Filter' menu under 'Blur', and a setting of just a pixel or two should be enough to take the harsh edge off the layer and give the appearance of being reflected in a soft, shiny surface.



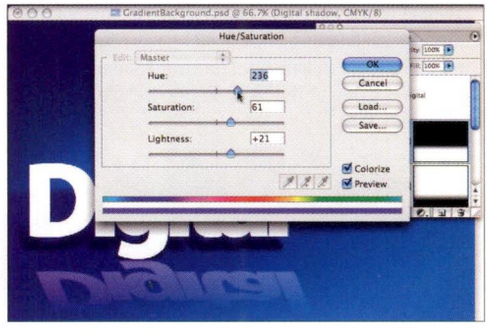

### 4: Add a Layer Mask

From the 'Layer' menu, select 'Add Layer Mask', 'Reveal All'. Choose the 'Gradient' tool, and drag a black-to-white gradient up the Mask. This will fade the reflection as it gets further from its source. You can fine-tune the reflection by experimenting with the 'Layer Apply' modes and opacity settings.




### 5: Add a shadow

To create a perspective shadow, follow the steps above with only a few minor changes. When you create the duplicate text layer click the 'Lock Transparency' button on the 'Layer' palette, and choose black as your foreground colour. Press 'Option' and 'Delete' to make the text black, then transform it backwards.




### 6: Blur and colour

For a realistic shadow you'll need to blur it more than the reflection, and tweak the hue. Set the layer to 'Multiply' and open 'Hue/Saturation' in the 'Adjustments' section of the 'Image' menu. Click 'Colorize', increase the lightness and saturation, then change the hue to match the background.

[ writer: **Mark Kendrick** | hardware: **Apple iMac G4 17"** | software: **Adobe Illustrator CS** ]

# CREATE VECTOR RETRO ART

## Adobe Illustrator CS is a powerhouse of vector art creativity. We put it to the test and challenge it to recreate the classic Americana signs from the Forties and Fifties

**Perhaps the most overlooked arm of the Adobe Creative Suite is Adobe Illustrator CS.** Its way of drawing graphics by working with vector co-ordinates rather than pixels has some designers and illustrators running for the pixellated safety of Photoshop every time, but Illustrator is a gem of a program that has had some significant upgrades in its elevation to CS level. And now with the vector look back in vogue thanks to Web animation done by Macromedia's Flash, Illustrator is the new must-know package. So, what better way to connect with this terribly fashionable 'now' program than to give it the challenge of recreating a cool design style of the past?

The graphic overstyling of American popular culture of the Forties and Fifties is nothing short of beautiful. In what was arguably its peak era of design, America's pop culture graphical styling gave the US a strong global identity and 'branding'. Coca Cola, drive-in movie theaters, diners and Cadillacs are prime examples of exciting visual styles that have influenced design and fashion culture ever since. Now, with influential illustrative designers such as Rian Hughes and Shane Glines taking aspects of this style into their work, retro Americana-influenced graphic design has never been more popular, or indeed well-suited, to test Adobe Illustrator.

With this in mind, we've taken up the challenge of creating a mid-Fifties American drive-in diner logo that, after completing this tutorial, will have you not only more proficient in Illustrator, but you'll be ordering a steak and shake at the local Be-Bop Deluxe before you know it! ■

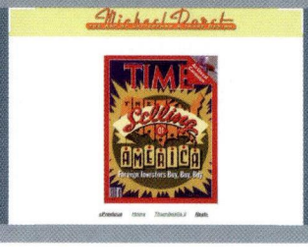
■ *This mock-up of our logo on a Miami street gives you the idea of what we are trying to achieve with this tutorial*

**Edited using Warp**
One new addition in Illustrator CS is a re-editable Transform tool, which allows all your different items to be warped to destruction

**Text along a line**
Creating text that runs along a curved line is a cinch in Illustrator CS. We show you how to achieve this within this tutorial

## Do your homework first

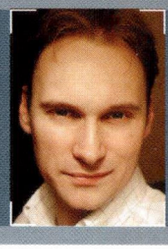
The trick to successful logo design, and especially retro graphic work, is to understand the genre you are trying to emulate. We've gone for the look synonymous with the late Forties to late Fifties, so we checked out various examples of retro signs before tackling our graphic. Look to other artists in the same design field too. We were influenced by the excellent work of Michael Doret in particular, whose retro work has been featured in, among others, *Time* magazine.




*You can't get better retro logo design anywhere in the world than that by Michael Doret. If you're serious about this type of art, you simply must check out Michael's work.*

YOURGUIDE

**MARK KENDRICK** is Art Director at Highbury Entertainment. He's racked up over 17 years of experience in corporate and magazine design, including legendary titles *Crash* and *Zzap! 64*. He has also been involved in concept design and art direction for over a hundred new launches, including new Mac title, *iCreate*.



### Colour enhanced with Gradients

A neat finishing touch is to create graduated blends that you can assign to shapes to enhance the tone and give depth to an otherwise flat surface

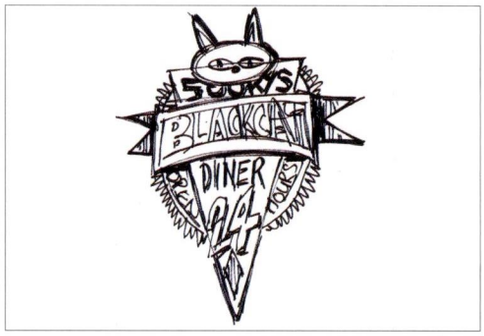
### 3D Transform option

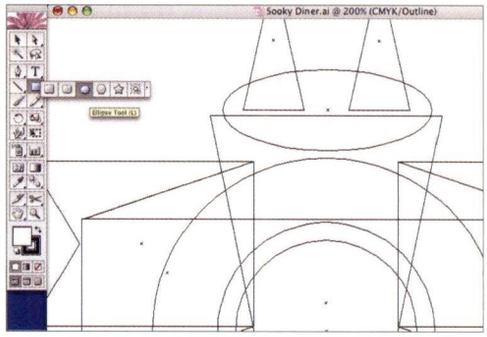
No matter how great your logo is, try taking it one stage further with the new 3D function. As you can see, this really does add another dimension to your piece.

*Created entirely in Adobe Illustrator, this fifties American diner logo is a simple enough project to follow but packs an important creative principle – as logo styling is an essential part of graphic design*

# Step-by-step: drawing the sign

Crafting the basic logo shapes is child's play with Illustrator's drawing tools



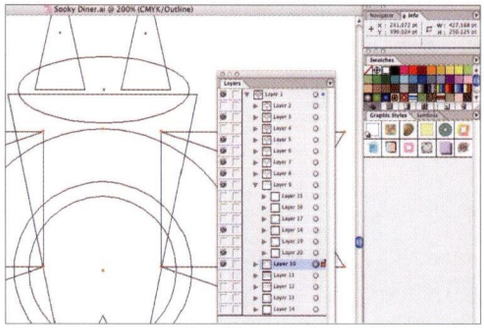




## 1: Plan your illustration

Start with a plan. It sounds obvious, but things can get tricky with Illustrator very quickly, so start with a clear sketch. Ours looks a little vague, but even this will give you an idea of what you are trying to achieve and provide a visual reference of the key items you want to include in your logo.

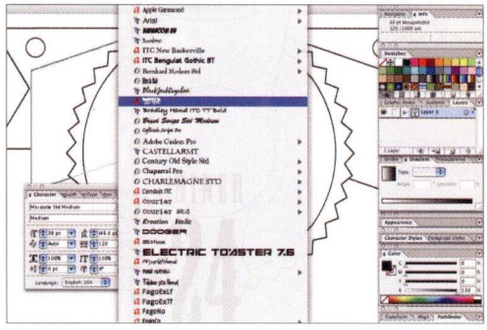
## 2: Start by drawing basic shapes

Assuming you know a little about Illustrator, start by drawing the key logo shapes using the 'Geometic Shapes Creator' from the 'Toolkit' palette. Don't worry too much about colour at this stage. In fact, we've decided to do all our logo creation initially in white with a black stroke for clarity.



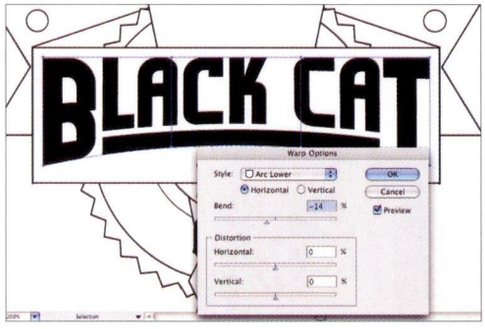

## 3: Planning by Layers

Working from back to front is a no-nonsense way of drawing in Illustrator, so when creating your shapes use Layers if you feel the need, using the 'Layers' menu. This will keep shapes separate so you won't get into a mess later on and find it tough to access the relevant items when colouring up.



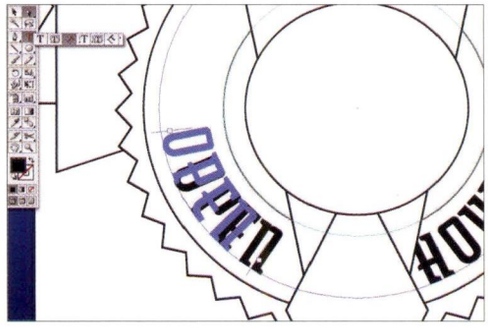

## 4: Choosing the right fonts

Going retro means careful consideration of the typography in your logo. Do your homework for what was in vogue in the Forties and Fifties, and choose a font that's functional but has flourishes associated with the hand-drawn extravagance of the era. We've chosen Airedale, Bomr and Mesquite.




## 5: Using the Warp factor

With basic shapes drawn, let's bend items using 'Warp'. Select the text and objects to shape, and select 'Envelope Distort', 'Make With Warp'. There are various settings here, but we've chosen the 'Top Arch' option. Hit 'Preview' to see your object bend. 'OK' your options once happy with the preview results.




## 6: Type on a curved line

For our 'Open Hours' text, first draw a circle, then select the 'Text' tool and drag right to access the 'Type On A Path' tool. Click on the circle and type in your text. Then use the 'Direct Select' tool and click on the text's vertical line text guide. Drag this line around and the text will move inwards or outside the circle arch.

# CREATE VECTOR RETRO ART

## Your quick guide to the Illustrator CS work area used

The palettes and working environment of Adobe Illustrator CS are designed to feel comfortable and logical to the creative user. Photoshop and InDesign users will find this easy to get into right away

### Toolbar tactics

Much like in Photoshop, all major drawing tools are here, and it will be essential to master the Pen tool

### Brushes, Styles and Appearance

Saveable libraries of art styles can be kept here. Pen brushes, elaborate border styling or complete item characteristics are also stored in this palette

### Type handling

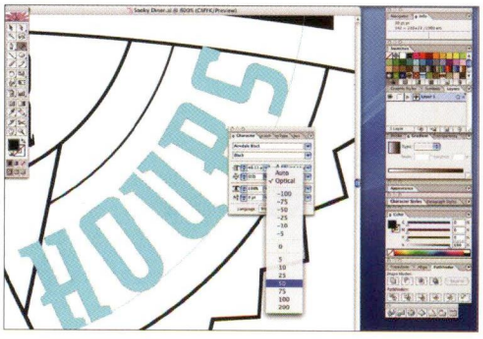
Enhanced with CS, the type handling in Illustrator is now very similar to that of Photoshop and InDesign. Effective, powerful type controls are all here

### Colour Swatches and Gradients

Many colour methods are stored here, including RGB, Pantone and CMYK colour profiles. Plus, here you can create your own Swatches and Gradients

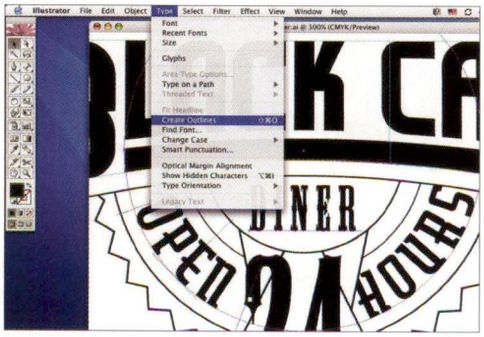
### Working with Layers

Break up your images into Layers to avoid confusion among all those vector points you'll create



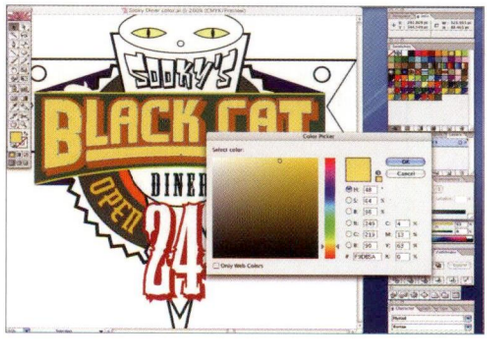

### 7: Kerning for Strokes

Within our illustration there are coloured lines called 'Strokes' around many items. With text in particular, the Stroke needs to be accounted for by allowing a little more space than usual between each letterform. This space is called the 'Kern' amount. The space between lines of text is called the 'Leading' amount.




### 8: Convert to Outlines

In order for text to be manipulated effectively, and for the illustration to be able to be output by any printer or bureau house, it's advisable to convert all text to outline graphics. That way you won't have to provide fonts as well as the illustrator file. So highlight all text, and select 'Type', 'Create Outlines'.

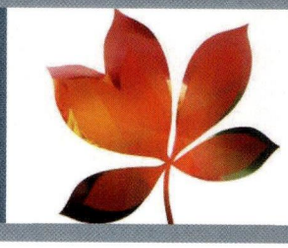



### 9: Start to embellish with colour

The logo has been drawn as a finished black and white graphic. Now it's time to add some colour. Use a sensitive colour palette, choosing muted, tertiary tones to emulate the stylised printing feel of the Fifties. Select each item and use the 'Swatches' window as your first source for colour.

## Expanding on the CS brand

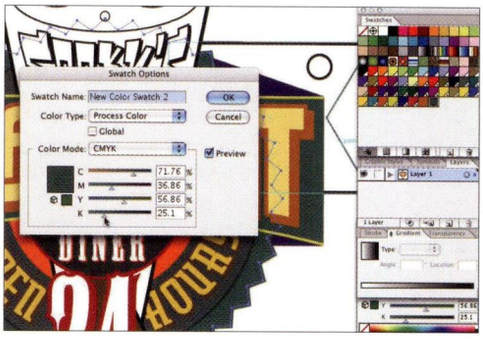
Adobe Illustrator CS is part of the publishing phenomena called the Adobe Creative Suite. This brilliant idea from Adobe is a one-stop shop for all things creative. Not only is it essential for all serious creative designers, but it's also a bargain at £1,115 for the Premium Edition. It encompasses Illustrator (vector drawing package), Photoshop (image manipulation and more), ImageReady (Photoshop plug-in for Web graphics and animation), InDesign (layout program), Go Live (Web builder), Version Cue (workflow management software) and Acrobat Professional (PDF file creator and reader).



*We cannot stress enough our recommendation to buy the whole Adobe Creative Suite if you can. It is quite literally all you'll need for print and Web-based graphic design*

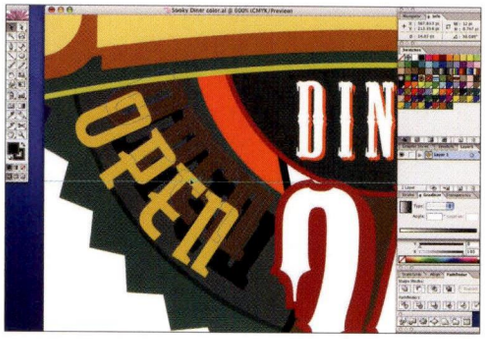


There are plenty of interesting destinations online to find out more about this type of design, and these are but a few:
**www.michaeldoret.com,**
**www.misterretro.com,**
**www.fontdiner.com,**
**www.cartoonretro.com,**
**www.logolounge.com and**
**www.retroclipart.com.**



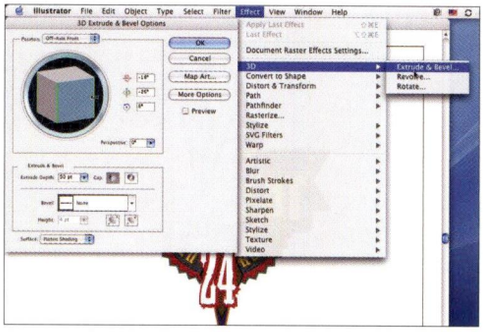

### 10: Editing swatches

The 'Swatches' palette is where you edit, use and save any colours you create. For our illustration the preloaded standard swatches are too harsh, so we used these as a starting point only. You edit a swatch colour by 'Double-Clicking' a swatch and moving the sliders until you're happy with the colour.



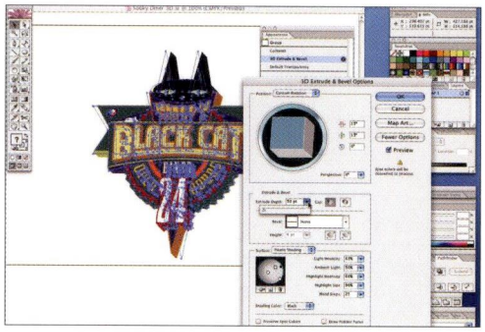

### 11: Strokes and fills

Our text has Drop Shadows, Strokes and Fills. To create these, first colour the text and apply a Stroke in the same colour. Then duplicate this text and move it up and left of the original. Copy the duplicate, and place directly on top of the second version. Colour this up differently and take off the Stroke.



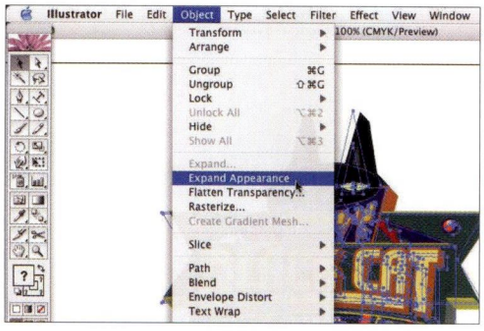

### 12: Adobe Dimensions revisited

Our graphic is pretty much finished now, but how about taking it one step further with a 3D effect? Illustrator CS now has the old Adobe Dimensions program built in and this works in the same way, except any 3D rendering you do in Illustrator is totally customisable, just like the 'Effects' palette in Photoshop.



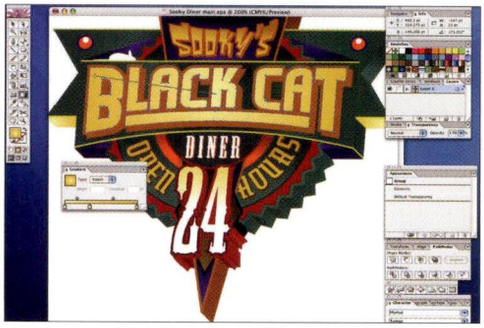

### 13: Applying a 3D effect

First group your logo together as one item. Then go to 'Effect', '3D', 'Extrude & Bevel'. This opens up a palette window that allows for various 3D effects to be applied to your image, along with lighting too! We only wanted a subtle 3D effect, so went for a simple 15-degree movement on the image.




### 14: Expand appearances

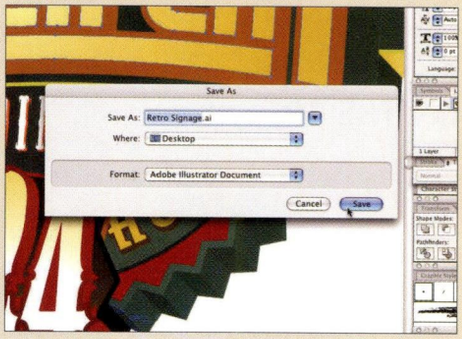
Once you are satisfied with your 3D appearance apply the settings. You can go back and tweak this at any time by clicking on the 'Filter' logo in 'Appearance'. But once happy with the look, we want to add even more to our logo, so highlight your logo and choose 'Object', 'Expand Appearance'.




### 15: Tonal details

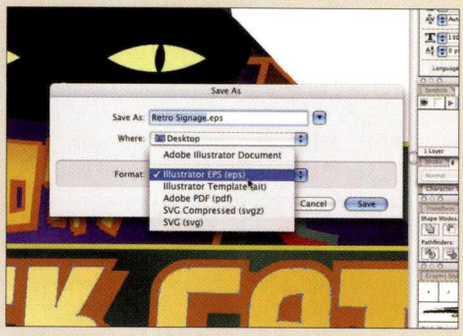
This will convert all that 3D work into editable, coloured polygon shapes. Using the 'Direct Select' tool, we highlighted individual facets of the image and applied gradients to them to add a greater sense of depth to the 3D styling. See how rich this image is now? A stunning 3D, retro-inspired diner logo.

## Saving illustrations



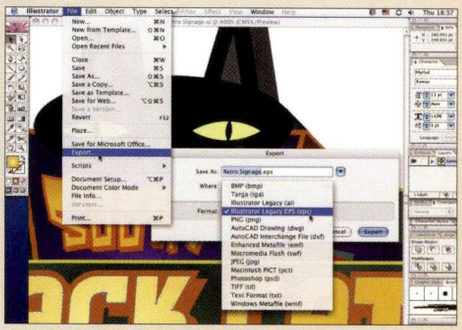

### Saving to native file format

Adobe Illustrator graphics come in a very flexible format. There's a plethora of saving options for your art. Go to 'Save As' and you'll be greeted by a myriad options. If you plan to only access your logo in Illustrator CS, then choose '.ai' file format, the native Illustrator format. But there are others...




### Illustrator EPS file format

This format is a generally accepted format of all Illustrator work. EPS files are, in the main, small files that are readable by all third-party graphics applications such as Photoshop, Freehand, Flash, InDesign and even Quark Xpress. But be careful in Xpress – the preview image looks a bit naff.




### Legacy file format

Need your graphic to be opened and edited by earlier versions of the program, such as the still popular Illustrator 8? Then you'll need to export the image as a Legacy file instead of saving your document. This will ensure your logo can be read by those running OS9-based versions of the program.

[ writer: **Lawrence Zeegen** | hardware: **PowerMac G3** | software: **Freehand MX**]

# CREATE WITH STROKE AND FILL

## Getting to grips with the Stroke and Fill tools in a vector app is at the heart of your workflow. You'll be creating great images in next to no time...

**ON THE CD**

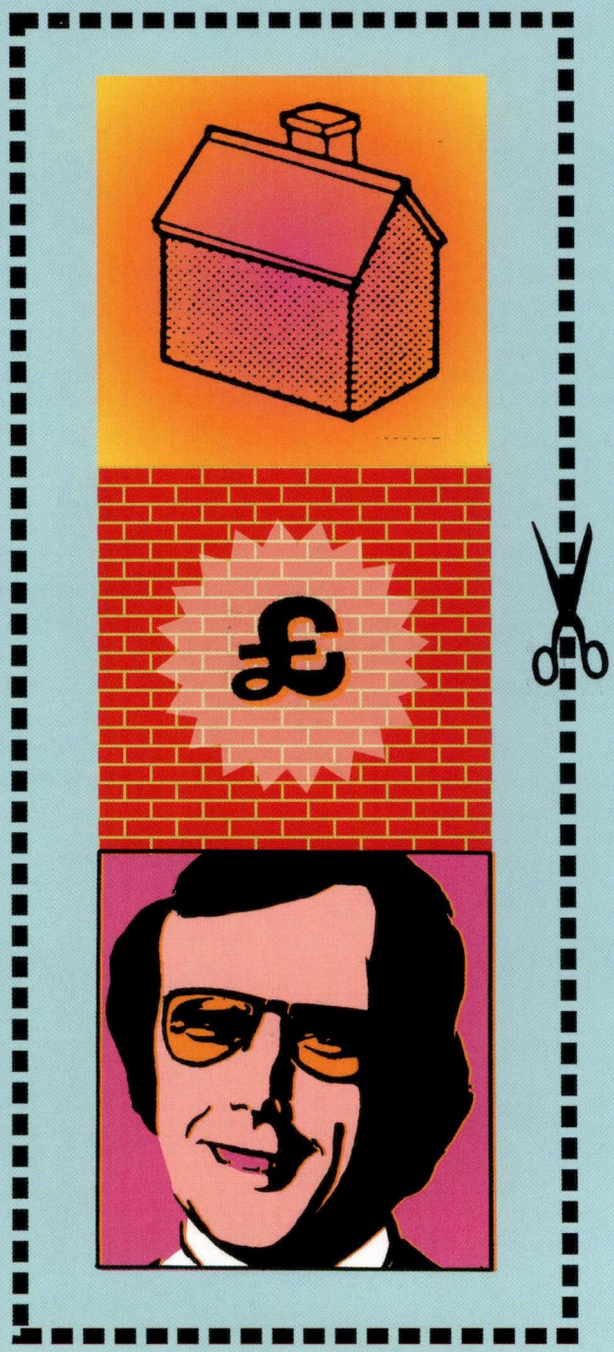
*house.tif*
*man-head.tif*
*scissors.tif*
*£.tif*

**Any busy working illustrator or designer using a vector application today will tell you that getting ahead with the software means getting your head around the basic tools.** Of course, practice makes perfect and the sooner that simple tasks are handled in a straightforward manner the better, and where more obvious to start than with the skills that all vector fans must master – the critical Stroke and Fill tools.

Creating both simple and complex images in Freehand requires some use of the Stroke and Fill tools – it is a fact of vector life that can't be ignored. There is a very easy way to explain the differences between each of the features; the Stroke is simply the style that you can apply to any path or line that you create in a vector application, and the Fill is the colour or effect that you can apply to any area within a joined path. How you use these tools to create images can be down to personal taste but there are a number of basic methods that sit behind every vector-created masterpiece. It is often wise to grasp the working methods first and then begin applying them to your illustration practice as you increase in confidence and imagination.

We examine a variety of methods within this workshop as we build a final piece, but the most important lesson to learn is in how the techniques can be applied to your own image-making and illustration. Understanding how the tools function and the best way to get the most out of them is paramount, and remember – practice makes perfect! ■

*Seemingly complex images can be built up using a range of simple Freehand techniques – you'll learn them all in this workshop*



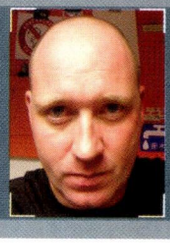
## Perfect planning

When filling objects, think a little before just steaming in. What are you trying to achieve with the image and how can this best be done? It can really pay to produce small thumbnail sketches or on-screen visuals so that you have some space to plan roughly how you would like your image to work visually. Of course, nothing should be set in stone at this stage, but at least have some idea about what you are trying to say with your work.

*Thinking about the effect you want to create is important if you want your work to be as good as possible. Even if you choose to go down a different route in the end, planning is a plus*

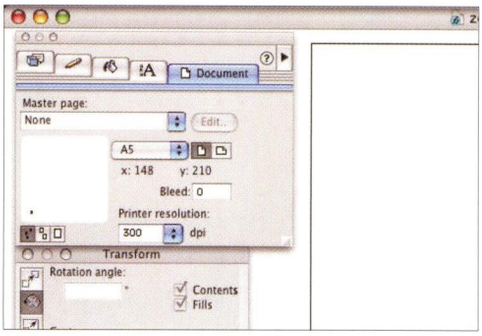
YOURGUIDE

**LAWRENCE ZEEGEN** has been working as an illustrator for numerous clients in publishing, design and advertising for over 18 years. He writes regularly for the design press and, as Academic Programme Leader for Communication and Media Arts at The University of Brighton, leads courses for the BA (Hons) Graphic Design and Illustration. To view his work, go to **www.zeegen.com**.



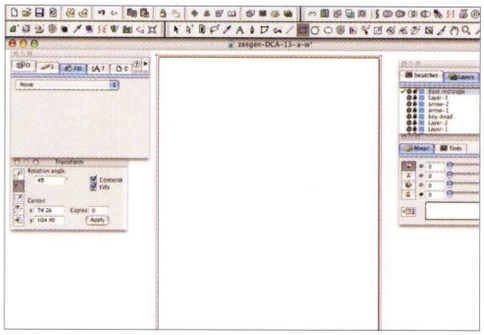
# **Step-by-step:** find your feet with stroke and fill

The simplest techniques can create some remarkable effects and images...



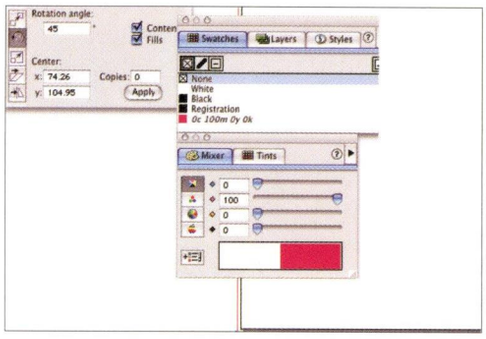

## 1: Setting up

In Freehand open a new document and set the size to 'x = 148mm' x 'y = 210mm'. This is a standard A5 size and can be created within the 'Document' panel. While here, set the 'Printer Resolution' to '300 dpi' – the best to use for commercial print work.



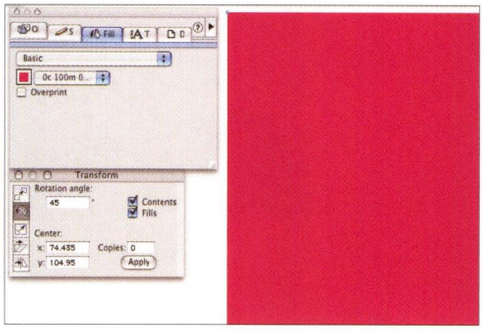
## 2: The closed path

Just like the white starkness of the blank piece of paper facing a novelist, the blank screen can set a designer or illustrator's blood pressure rising. Get something (anything!) on the screen to get underway – here we created a rectangle that covers the entire document area.



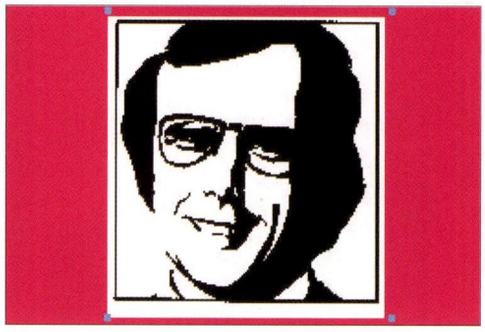

## 3: It's in the mix

You'll need to create some colours to work with. To start, create a simple magenta by choosing the 'Color Mixer' panel and moving the slider to '100%'. Next drag a cube of magenta from the colour bar beneath the sliders into the 'Swatches' panel.



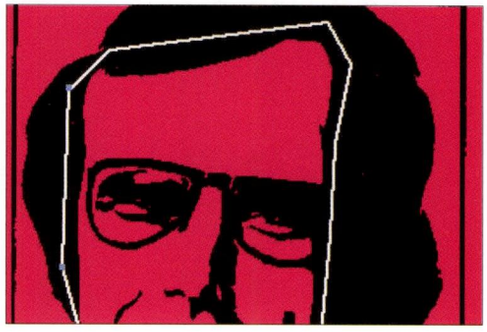

## 4: Fill 'er up

Add a simple Fill to your closed path or rectangle. Do this by going to 'Fill' in the 'Inspector' panel and choosing the 'Basic' option. We'll be looking at some of the other Fill options as we progress through this workshop – Freehand filling mastery awaits!



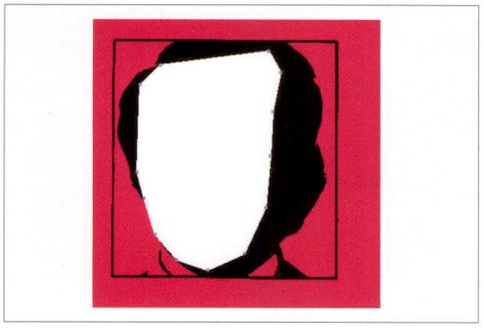
## 5: The man for the job

Import the file 'man-head.tif' from the cover CD. You can do this by opening a new Layer and going to 'File', 'Import'. Place the head in the lower part of the image and then make it transparent by selecting 'Transparent' in the 'Object Inspector'.



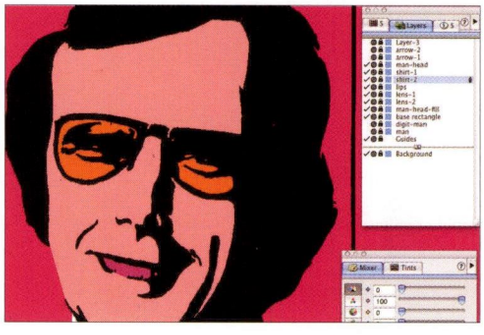
## 6: Filling with basic options

To fill a simple shape with the 'Line' tool, rather than the 'Rectangle' tool as in Step Two, first open a new Layer and place it above the Layer that you wish to fill, in this case the man's head. Using the 'Line' tool start drawing an area to fill, but in a different colour to the shape that you wish to fill.



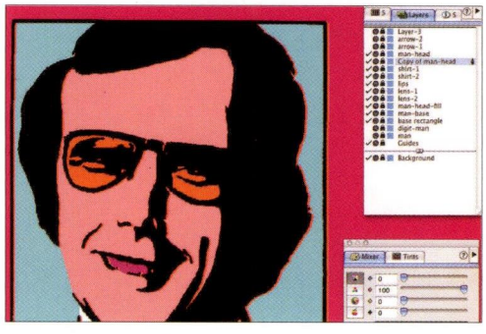
## 7: Closing paths

Once that's done, create a joined path by selecting each of your lines ('Select All'). Go to 'Modify', 'Join' to have the lines join up, creating your closed path. Choose 'Fill' from the 'Inspector' panel. We are filling in with white for the time being – we'll go back and change colours when we're ready.



## 8: Easy when you know how...

Place the new Layer under the Layer featuring the man's head and you should now have created the most simple of custom shapes with a basic fill. This is a technique that you'll use more and more when creating vector images. Do the same with the lenses on the glasses and other facial details.

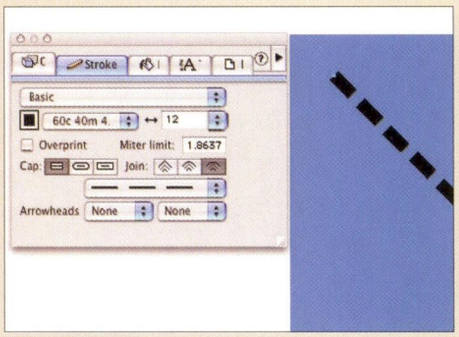


## 9: Blurring the line

Create a rectangle and fill it to make a background for the man's head, placing it beneath all the recently created Layers. Duplicate the Layer with the original TIF on it and put it under the original. That Layer's Fill has been changed from black to orange and moved to the right, giving a disjointed effect.

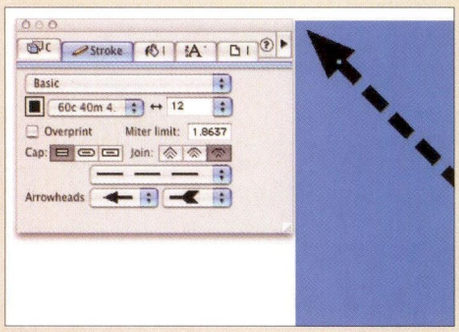
# FREEHAND'S STROKE AND FILL

## Arrows and dots



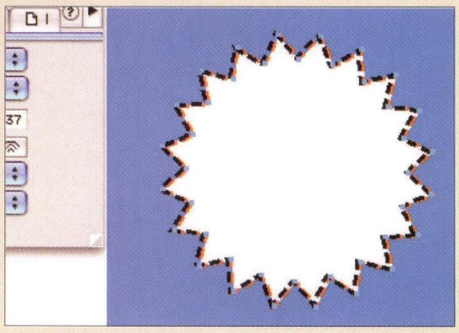

### Making a point

As well as creating a funky dotted line it is also possible to add arrowheads and tails. This is very simple to use and great at the times when only a whole arrow will do the job! Start by creating a straight line and then making it dotted as described in Step 20.




### What's the point?

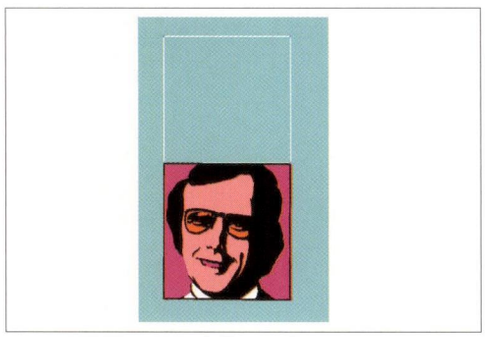
In the same 'Stroke Inspector' panel check the 'Arrowheads' option so the top of the line is a head and the bottom has a tail. You can swap these around and they stay in position as you move the arrow into place. You can use this feature to build quite complex diagrams if you colour-code arrows.



### Other options

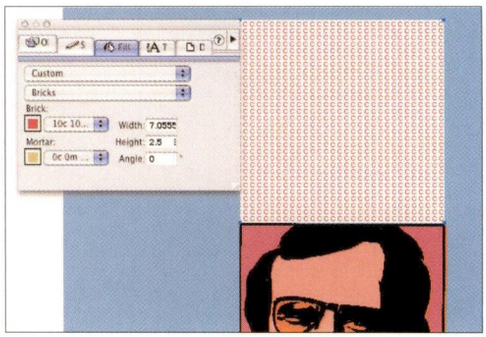
The dotted line can be applied to any shape as long as it has been created as a vector line. Here a polygon has been 'drawn' using the Polygon tool set to 'Dotted Line' and then duplicated with the copy Layer re-coloured, filled with white, placed under the original and off-set.

## Continued...



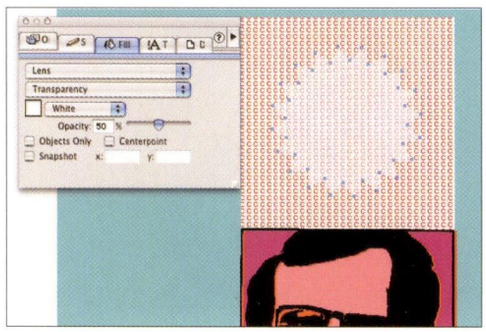
### 10: Building bricks

Here we can start to look at one or two of the custom fills that can be applied to closed-path objects. Start by creating a fresh rectangle in a new layer. It has been placed here right above our man's box and by holding down the 'Apple' key when drawing the box you'll create a perfect square.



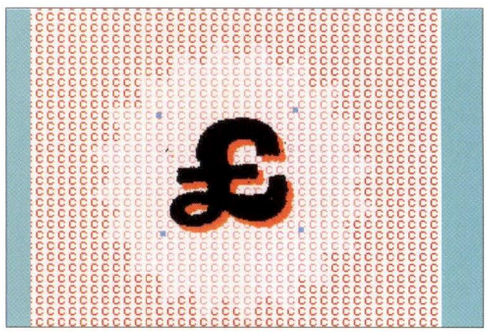

### 11: Mixing the cement

After drawing the box, go to 'Fill' and choose 'Custom', 'Bricks'. You'll notice that you can't see bricks but rows of 'C's – this is normal, so you'll have to try to visualise how this will look. Click on the options that give you red bricks and yellow mortar, choose the height and width of your bricks and set at '0' angle.



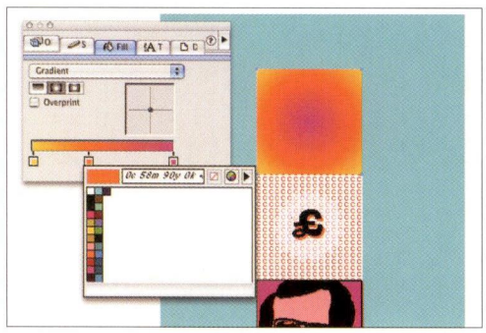

### 14: Using a new fill

Once you've drawn your polygon and got it into the correct position on the brickwork (not that you can see it), go to the 'Fill' option for the new object. From the drop-down menu choose 'Lens' and 'Transparency' and set the slider to '50%'. Here this is used with the Fill colour set as white.



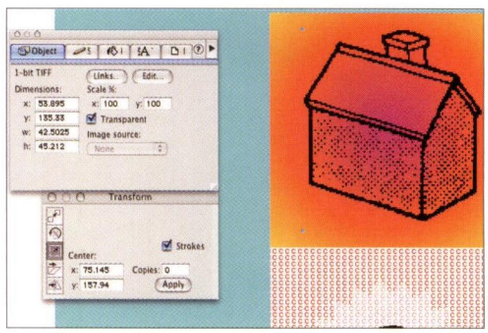
### 15: Adding some value

Import the '£.tif' from the cover CD and put it on a new Layer. Place this onto your polygon. Duplicate as before, change the copy to orange and move it to one side. In an illustration about estate agents, house prices and so on, it pays to push the idea home – if you'll excuse the pun.




### 18: Adding more flare

It is possible to add a wider range of colours simply by dragging a new colour swatch or box from one of the existing boxes and changing the colour once again. Here a pink merges into orange and then into yellow in a subtle yet sophisticated way – just like a real tequila sunrise!



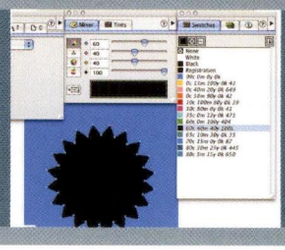

### 19: Our house

Import the file 'house.tif' from the cover CD just as you have done in previous stages of this masterclass. Ensure that you make the object transparent again so that you can still see the tequila background through the image of the house. Transparency and layers are always so vital in vector work.

CREATIVEPRIMER

## Paint it black

Here's a little-known tip for Freehand users when creating colours for professional print. Don't settle for the black that comes straight out of the tin; mix the very best black that you can. Create a deeper, darker and richer black from 'Cyan 60%', 'Magenta 40%', 'Yellow 40%' and 'Black 100%'. When the plates are made for litho printing, your black will be created from printing at each stage of the process and this is what creates the very best results. It is worth remembering that this tip is useless for those of you taking your Freehand images into Flash for the Web, as this only works with professional printing, but don't forget – you heard it here first!

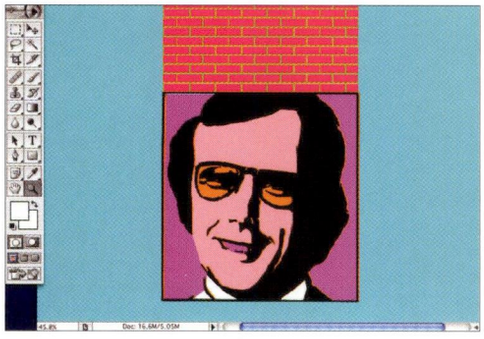


*It's the little details that help you to impress – particularly when there are many great vector artists out there. Bumping up the quality of your black will help you stand out*

WEBRESOURCES

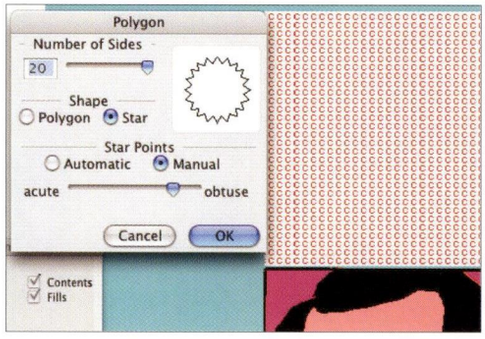
Obviously, **www.macromedia.com** is the site for all Freehand downloads, products, free trials and so on. Alternatively, **www.sfmmuf.org** is the site for all San Francisco Macromedia users and is well worth a look. Boasting over 1,200 members, some of whom write and publish books on the subject, it packs in some serious stuff.

# Take control of your Line options



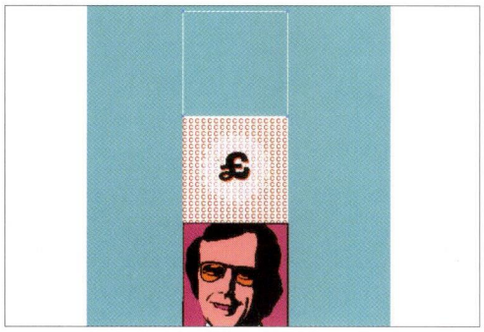
### 12: Checking your brickwork

You'll want to check out your bricklaying skills, and who could blame you? You'll need to save your document into a new format. Start by going to 'File', 'Export' and in the options offered choose 'EPS'. You'll then need to open your new document in Photoshop, which will rasterize your file.



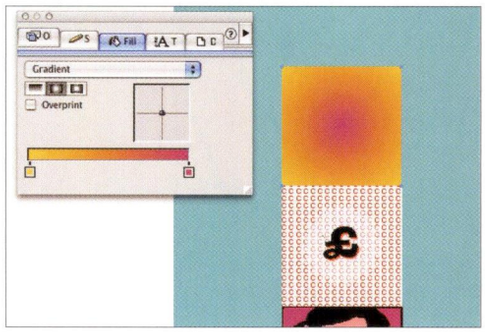

### 13: Adding another custom shape

Now add a polygon. Double-click on the 'Polygon' tool to open the dialog box and set it to give '20' sides in a 'Star' shape with the slider bar set towards the 'Obtuse' setting. Click 'OK' and then you can draw your polygon directly onto the brickwork.



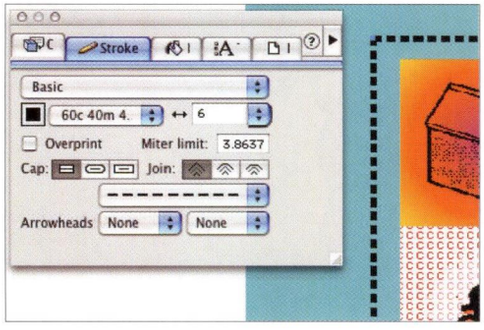
### 16: New box for old

Exactly as you've done previously, create a square using the 'Rectangle' tool. Place this rectangle on top of the brick box. The idea is that all three boxes will link visually to provide a triptych, each panel representing an aspect of the humble estate agent!



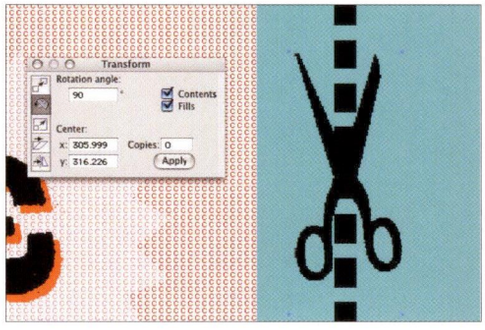

### 17: Tequila Sunrise

Using the special fill features you can create a range of stunning effects. To recreate this sunrise effect, choose 'Fill' from the 'Inspector' panel and opt for the 'Gradient' feature. Highlight the 'Centre' option, creating a gradient that changes from one colour to another from the centre outwards.



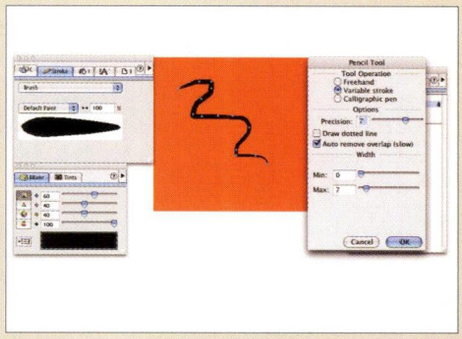

### 20: On the dotted line...

Next we'll look at a simple use of the 'Stroke' tool to create a different kind of line. Start by drawing a straightforward straight-line rectangle around the three boxes. In the 'Stroke' tab of the 'Inspector' panel change the line to a dotted one following the commands as shown above.



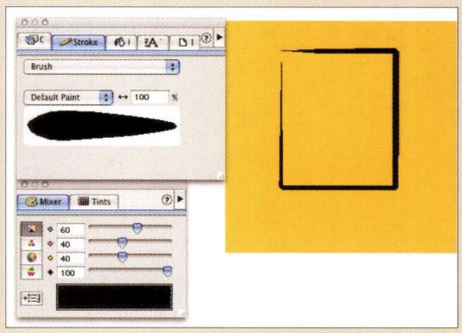

### 21: Scissor sisters

Add a pair of scissors ('scissors.tif' on the CD), and rotate by 90 degrees to get them into position. The 'Rotation' tool is in the 'Transform' panel. Now go back and adjust any small details and colours that may need amending and there you go – a cut-out estate agent and house for him to sell.



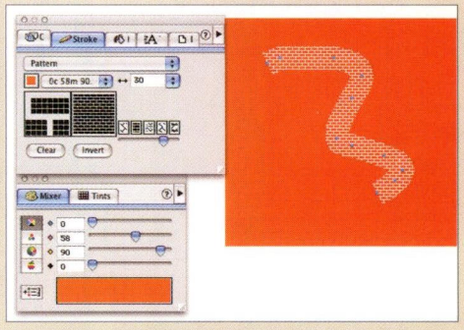

### Paint with a pencil

Push the limits of what the application intended and see what results you get. With the 'Pencil' tool set to a variable line, and with the 'Stroke' set to 'Paint' with the default brush we start to get some interesting results. We're not sure when you'll need to use this, but you never know...




### Square peg

Using the same technique but with the 'Rectangle' tool gives a strange new look to the standard rectangular shape. Trial and error with the Freehand toolset can throw up some interesting new looks, although it's best to learn new techniques when you're not facing a deadline!




### Another brick in the wall

Another option for building that brick wall (or at least that brick line) is shown above. Try creating it from the 'Stroke' panel. Here the line has been given a 'Pattern Stroke' and the 'Brick' effect chosen. The line is a massive 24 point but you can see what the capabilities are.

# PORTFOLIO

## FROM PHOTOSHOP AND FREEHAND TO INSTALLATION ART AND PAINTING, SELIM CATKIN IS AN ARTIST OF MANY DIFFERENT MEDIUMS. WE FOUND OUT MORE ABOUT HIS FORAY INTO THE DIGITAL WORLD

**SELIM CATKIN** has been an artist all his life, but he only picked up Photoshop and started working digitally four years ago. "I had just finished my Master's degree in Fine Art when I started to use Photoshop to prepare layouts and see previews of my paintings. Also in those days I didn't have a workshop, so I used Photoshop as a virtual art studio with unlimited brushes and colours."

These days Selim has his own art studio – funded by his day job in the mailroom of a large Nottingham company – where he experiments with everything from acrylic painting to large installations with audio and video. He doesn't neglect his virtual studio though, and alternates mediums depending on how the mood takes him. Soon after Photoshop took hold he begin to experiment with vector graphics in FreeHand 10, and it is with those two applications that he created the work over these pages. Having also experimented with Flash, Premiere, Illustrator and others, he has become more and more enthusiastic about the possibilities of digital art. Selim recently took a course in QuarkXpress and is now keen to break into the world of graphic design.

"I call myself an artist who does not limit himself with mediums. I believe good artists exist because of what they do, not how they do it," explains Selim. You can see a selection of what Selim does over the next few pages, and you can contact him at **selimcatkin@hotmail.com** if you're interested in finding out more about his work.

### 1_ MODERN TIME REVOLUTIONIST (2004)

**SOFTWARE USED: FreeHand 10 and Photoshop CS**

"When I have an idea, I do a sketch and think of the effects I could get in, such as brush strokes, colours, gradients and so on. If I like the sketch, usually the end result is very good. There is an instinctive satisfaction point, which sometimes work does not reach. Then it goes to the 'work in progress' folder. For this particular piece, I probably changed it four or five times."

### 2_ 12856 (2003)

**SOFTWARE USED: FreeHand 10**

"12856 is not a specific number. I was taking a video footage in the Market Square in Nottingham on a crowded Saturday and wondering how many people passed through it in a day. I started to imagine that everyone who passed in front of my video camera had got a serial number and I could see it on the LCD screen of my video camera. The idea of this work came from that video footage and the image I used was captured from the footage."

### 3_ UNTITLED (2004)

**SOFTWARE USED: FreeHand 10**

"I first wanted to create a minimalist scene with some industrial, urban elements and some typography, inspired by Japanese cartoon art. As I wanted it to be minimalist with flat colours, simple and clean objects, I decided to create the work in a vector-based program. Within the image I kept the density of colours and objects to a minimum, and used more of light and flat colours, which gave me the all-around balance I wanted."

# PORTFOLIO

## SEE YOUR WORK HERE AND WIN A PRIZE




IF YOU'RE A DIGITAL ARTIST after some publicity, Portfolio offers the chance to grab the exposure you deserve. If we feature your work on these pages you'll win a copy of Extensis Portfolio 7, the world's leading digital asset management software. Whatever the discipline, send your work to **dca@digitalcreativearts.co.uk** or stick it on a CD and post it to us. Do not, however, send us the only copy of your work!

For more information about Extensis products, please visit **www.extensis.com.**

### 4_ AUTUMN IN THE FAR EAST (2003)

**SOFTWARE USED:** Photoshop CS

"The tone and style of each piece is sometimes instinctive, but mostly I plan ahead the textures and the emotions I am going to apply. Once I have got the concept, every action I take while creating the work serves to create that concept. However, sometimes accidental actions can also give a very good result."

### 5_ DIAGONAL (2003)

**SOFTWARE USED:** Freehand 10

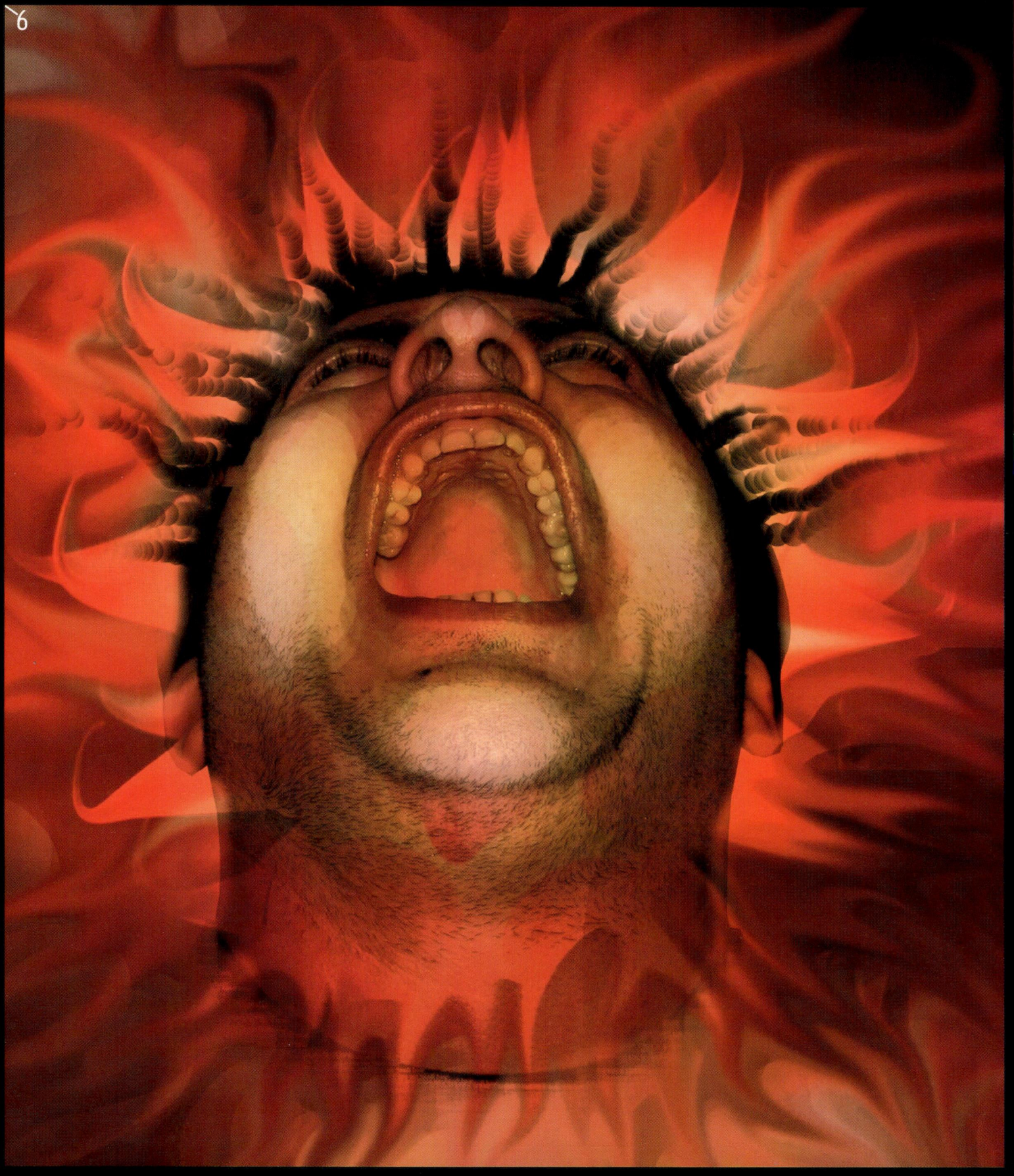
"I am mostly interested in flat, clean vectors but on the other hand I do not want to limit myself from experimenting with other styles."

### 6_ DEVIL'S FLAME (2004)

**SOFTWARE USED:** Photoshop CS

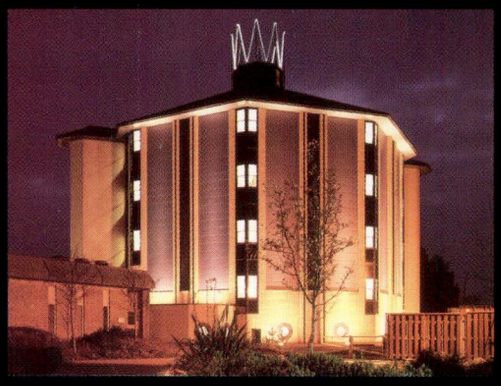
"The photograph used in this work is me, I took it especially. This work basically consists of two images: the photo of me and an image of a lampshade that I manipulated using the Smudge tool in Photoshop to give a flame effect. I find it very exciting to integrate different elements."

# SELIM CATKIN



BA (HONS)

# INTERACTIVE MEDIA PRODUCTION



## WE FIND OUT WHAT SOME OF THE GRADUATING STUDENTS FROM THE BOURNEMOUTH MEDIA SCHOOL HAVE BEEN UP TO

**The BA (Hons) in Interactive Media Production is just one of 10 undergraduate degree courses offered by the Bournemouth Media School, part of the wider University of Bournemouth.** The school stresses vocational learning, so students get plenty of chance to work on real-world projects.

The graduating class of 2004 used Photoshop, Flash, Director, Dreamweaver and many other programs on their final pieces, of which you can see a selection on these pages. Each student also had work shown in the graduation exhibition, called Pixel This. During the three-year course the students studied elements of audio, video, animation and Web design, allowing them a tremendous range of creative freedom when they began their own projects.

Coding, as well as creative applications such as Flash and Photoshop, is crucial, as is the collaboration between other students at the school, who might be studying anything from digital filmmaking to animation to sound design.

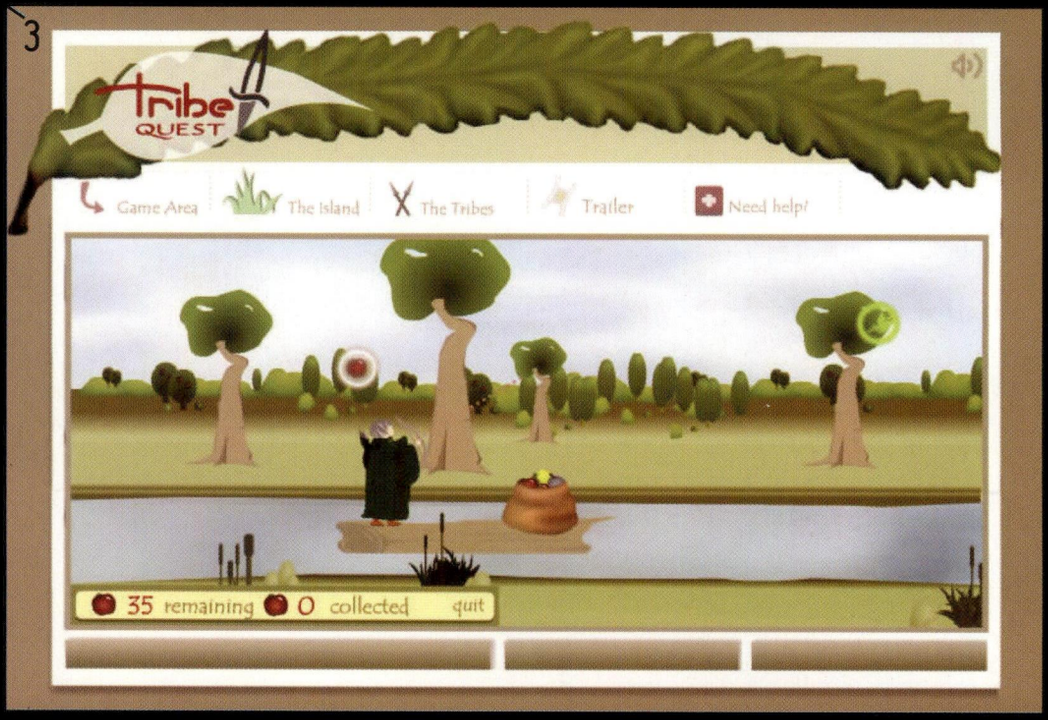
1

2

**SEE YOUR WORK HERE!**

Whether you're a student or a tutor, get in touch with us at **dca@digitalcreativearts.co.uk** if you'd like to see your course featured in the pages of *DCA*. You can be studying animation, illustration or interactive media – as long as it's a form of digital creativity then we're interested!

3




1_ oliver Dooley
**STORY MAKER** (2004)
**SOFTWARE USED:** Flash

2_ jonna Armstrong
**GENTLY DOWN THE STREAM** (2004)
**SOFTWARE USED:** Flash

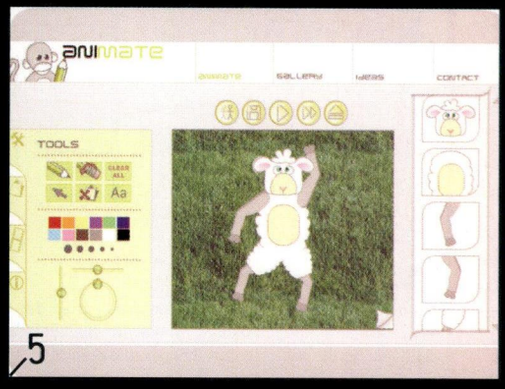
3_ jody Richardson-Kent
**TRIBE QUEST** (2004)
**SOFTWARE USED:** Flash

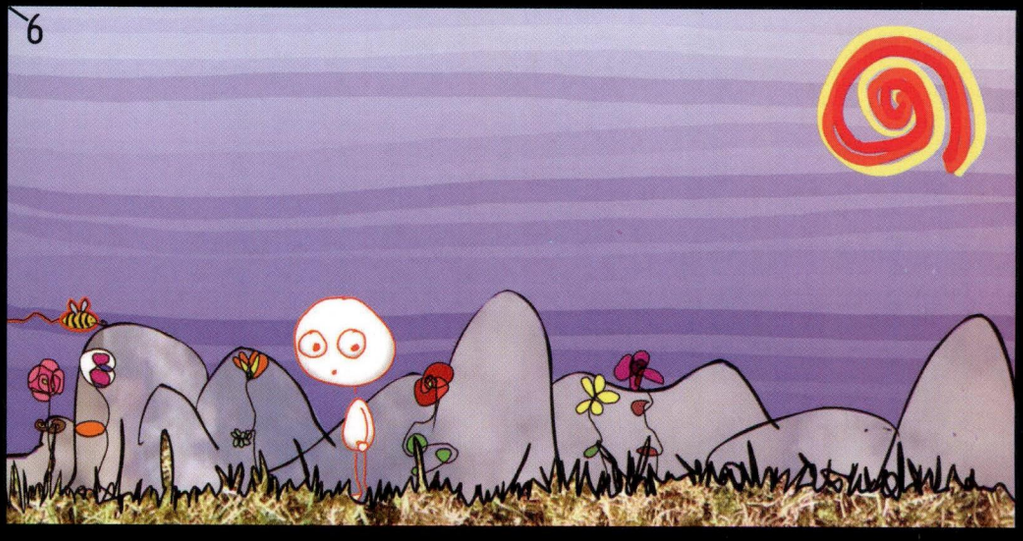
## Varied media

The pieces to be found in the final Pixel This exhibition vary enormously, both in their subject matter and their medium. For instance, Joanna Lush's work – entitled *Fate Listens* – stands alone as an interactive narrative, while Victoria Avery's *Animate* finds its home online, as a children's drawing and animation site. There are several other Web offerings, including Oliver Dooley's *Story Maker* and Shaban Siddiq's *SKN*, which is a fashion site.

There are also plenty of games to be found in the collection, including *III* by Andrew Parsons and *The Chicken Or The Egg* by Jodi Head. The latter finds its subject matter within the realm of interactive media itself – as it charts the development of computer games – while others take their inspiration from further afield, most notably Carla Bates' *DIY 4 Divas* (a DIY manual for women), and *Gently Down The Stream* by Joanna Armstrong (an interactive CD about rowing).

Check out the online version of the graduation exhibition at **www.pixel-this.co.uk** and find out more about the BA (Hons) in Interactive Media Production at **http://media.bournemouth.ac.uk**. If you think your course should grace the pages of *Digital Creative Arts*, let us know. It could be the first step to getting your creations seen by thousands of digital enthusiasts...




4_ shaban siddiq
**SKN** (2004)
**SOFTWARE USED:** Flash

5_ victoria avery
**ANIMATE** (2004)
**SOFTWARE USED:** Flash

6_ julian whitehorn
**AS IF IN A DREAM** (2004)
**SOFTWARE USED:** Flash

[ writer: Mark Towse | hardware: P4 2.66GHz | software: Adobe Premiere Pro]

# PERFECT YOUR SOUNDTRACK

## Audio is one of the most important parts of any DV project, yet even on high-end DV cameras it often sounds shocking. Use Premiere Pro to amend your acoustics

**ON THE CD**

*beertent_audioorig.prproj*
*beertent_audio_final.prproj*
*Audio_voiceover.wav*
*audio_beertent_audio.avi*

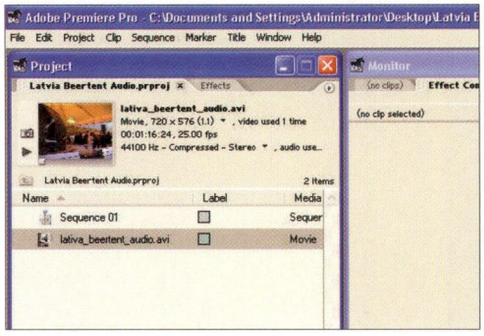
**With the latest release of Premiere Pro, 1.5, you now have a real heavyweight professional desktop editing program. Even though the main enhancements have been geared towards effects and animation, there's a host of new tweaks to help the quality of your audio match the quality of your video.**

Several new features now make it easier than ever for you to create professional, broadcast-quality audio from the most bog-standard of original audio material. One of the most common audio tasks is creating a full soundtrack from a combination of originally shot audio attached to your basic footage, special effects and additional sounds and sometimes even a voiceover. In this mock tourism ad we'll edit in a missing piece of audio, fix levels, enhance the overall sound with various audio filters and add a voiceover to create a miniature upbeat tourism reel. We'll be delving into specific audio waveform editing on and off the Timeline to show how, even when you have to change a battery and miss some all-important sound, any audio can be seamlessly dubbed over and blended to create a flowing soundtrack. Then we'll explore enhancing specific frequencies using the graphic equalizer and look at how you should be exporting audio at the end of a project to ensure maximum quality for the target audience.

By the end of these four pages, you'll be able to create a well-equalized seamless soundtrack from tinny audio that had an unforeseen break. Oh, and please forgive my sore throat on the voiceover – I don't really sound like that! ■

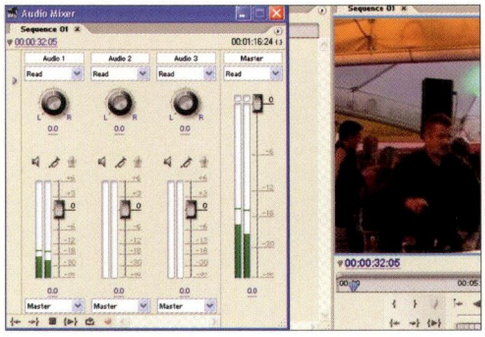
## Step-by-step: Creating a full soundtrack

**The complex task of editing waveforms is an essential skill to master when working with audio visual files, and Premiere Pro 1.5 handles the task better than ever**



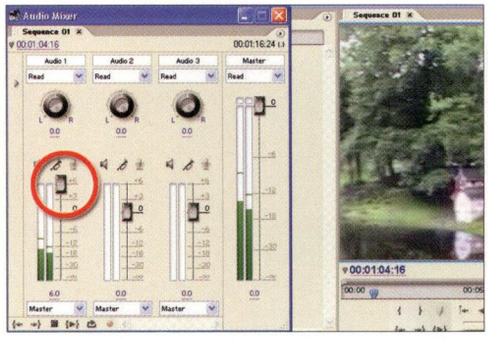

### 1: Starting out

First open up the 'Latvia_beertent_audio.prproj' from the cover CD. We are going to begin by modifying the audio levels and equalizing the audio so that there is consistency throughout the clip before we begin editing specific elements of the audio track.



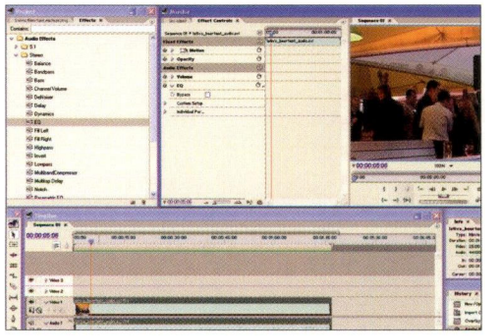

### 2: Raising the level

Go to 'Window', 'Audio Mixer' to open the main level's mixing panel. Play a segment of the beertent audio and you will see that the audio is playing very quietly. This was recorded in a very noisy environment with base levels set low to avoid any unnecessary distortion.



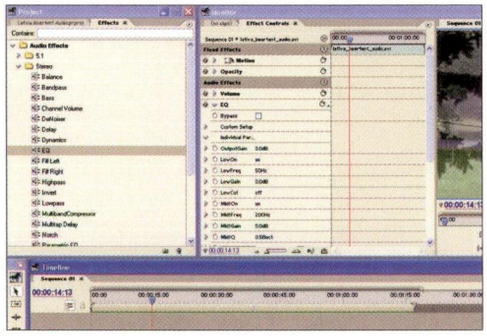

### 3: Get with the gain

Now you need to move the audio track gain control (which we've circled above) up to +6db. Because we were at an average volume of -16, we can safely increase the gain without rising above the master 0db (after which you'll find that distortion occurs).



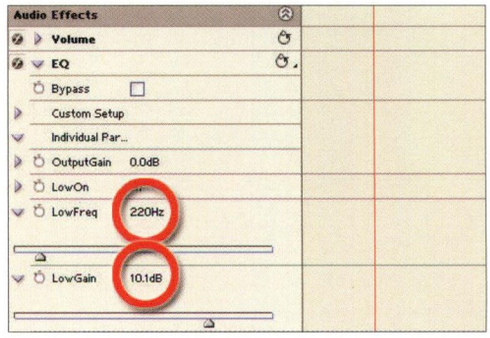
### 4: The equalizer

Click the 'Effects' tab in the project window and open the 'Audio Effects' folder. Drag the EQ filter (Equalizer) to Audio track 1 and twirl down the EQ settings. This is one of the most comprehensive equalizers available, and it has a lot of tweaking controls.



### 5: Ace of bass

Now we want to change the overall audio from all frequencies being relatively mid-range to isolating and enhancing the low, middle and high range frequencies separately. First you need to twirl down the individual frequency settings.




### 6: Frequency shifting

Because our low range of audio frequencies is relatively high, we need to set the low frequency cut-off higher than the default 50Hz. Twirl down the slider and increase the low frequency to 220Hz and raise the low frequency gain to 6db. The low range is now much richer.

SAYWHAT?

## Gain

Gain is a term for any overall volume changes made to a clip, be it positive or negative. Gain can be applied to any track individually, but if adding to a master clip you should ensure that levels do not peak above 0db, or you'll find that sound distortion will occur. Gain increases or decreases the levels of all frequencies in a clip, and an equalizer allows you to modify gain on individual frequencies.

YOURGUIDE

**MARK TOWSE** runs a new media house, Bigimpact TV. He earned his stripes as a senior designer and programmer at CyberGuide, Digital Divas and the major Islington design agency, Net-Clarity (now Fresh01), before setting up Bigimpact TV. His various creative guises have given him experience in all areas of media production.

# Using Premiere to perfect your audio

**Once you know you way around the workspace, you'll find that tweaking anything from decibels to distortion becomes a piece of cake. Let's zoom in on the main controls**

### Audio accuracy

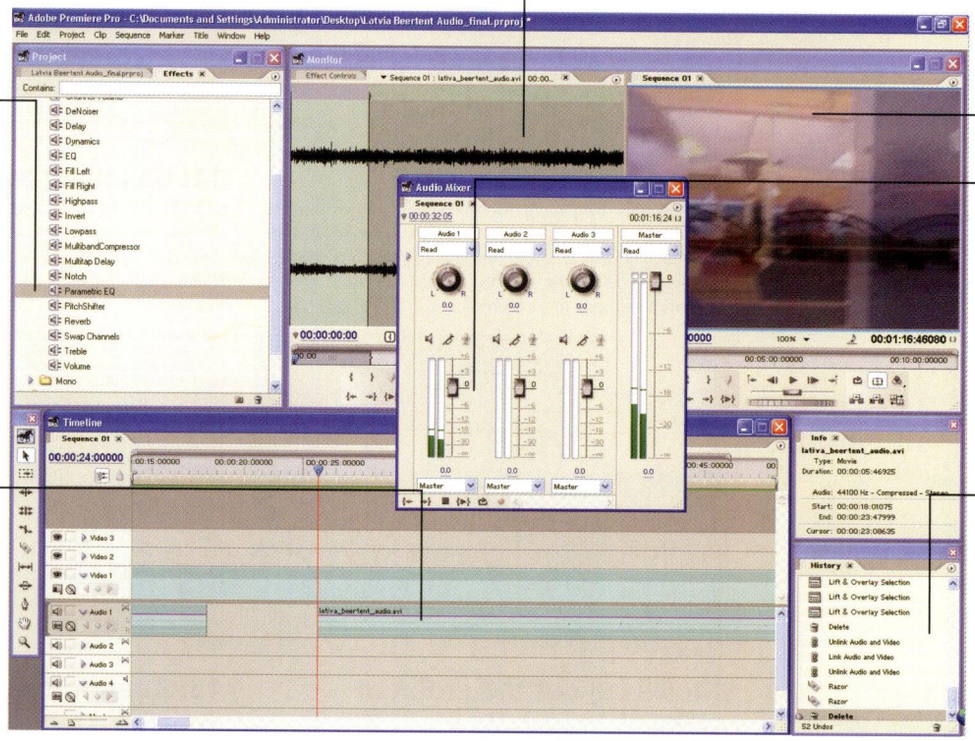
This is the monitor window with the audio waveform active. Whereas you can't directly edit the waveform within this window, you can pick out peaks and troughs which you can't visually see in the Timeline

### Main feed

The main sequence window, as always, displays the currently active video feed from the Timeline. Use the shuttle control for scrubbing through the audio in slow motion

### Exploring effects

Audio effects should not be seen as special effects, but as essential effects. Without question, the Parametric Equalizer or standard EQ should be used on virtually every audio you record, and definitely on audio taken from a basic onboard DV cam mic




### Master levels

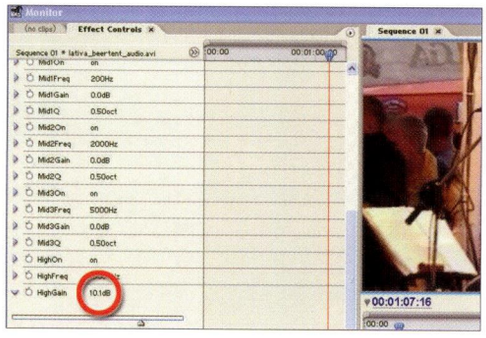
This is the track specific gain control displayed in decibels. To increase levels higher than +6, you should use the master level control on the far right, but beware of potential distortion

### Timeline

This shows audio and visual tracks and displays a track's audio waveform, but on quieter audio or on long clips which are zoomed out, it is virtually impossible to use – hence the waveform in the monitor window

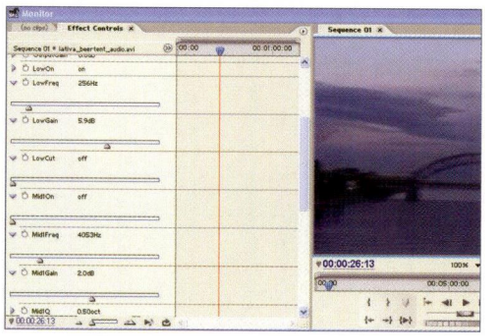
### History

The history controls become extra useful when editing audio using audio time units, as you'll find you need to perform a lot of specific undos. Use History instead of 'Ctrl + Z' and you'll speed up audio work rapidly



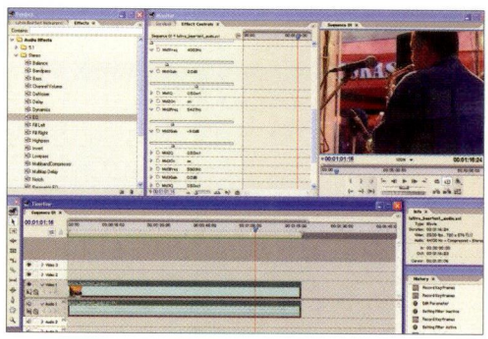

## 7: High range

Edit low then high frequencies so that there are two extreme points to check the final mid-point modifications against. Twirl down the high frequency gain, leaving the standard 10000Hz high frequency range intact, and increase the decibels to 10. This does enough to clarify high frequencies without tinniness.




## 8: Mid-range mastery

Premiere Pro 1.5 offers two mid-range settings, cunningly called Mid1 and Mid2 (as you'll find that you often want to modify more than one particular mid-range level). Now change the frequency of Mid1 to 4000Hz and increase the gain by just 2db.

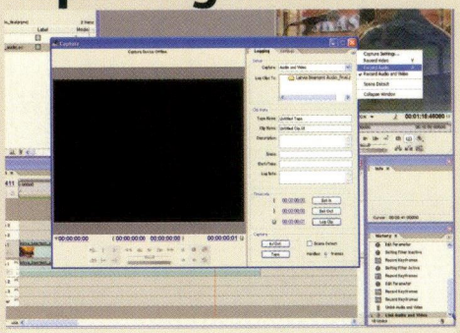


## 9: Glossing over glitches

For Mid2, change the frequency to 5400Hz and the decibels to -9, keeping the mid-range completely separate from the higher tones. With our levels and equalization taken care of, we can now commence editing out the continuity glitch at timecode 00:24:00 (which came from a battery change).

# PERFECT YOUR SOUNDTRACK

## Adding a voiceover: capturing audio

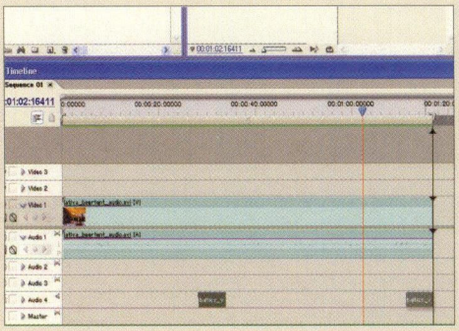


### Raw material

The easiest way to capture a pure voiceover is with your DV camera. Press 'F5' to enter Premiere Pro's capture utility. From the selection triangle, select 'Record Audio', record and then say in to your DV camera's microphone: "Welcome to the Baltics".

### Alternatively...

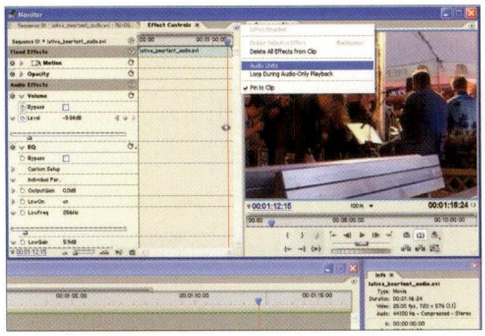
Microphones are not always great on lower spec DV cameras, so it can be equally useful to plug in a microphone to your soundcard and use the 'Sound recorder' utility from the accessories folder in XP, then importing the WAV file.



### Track work

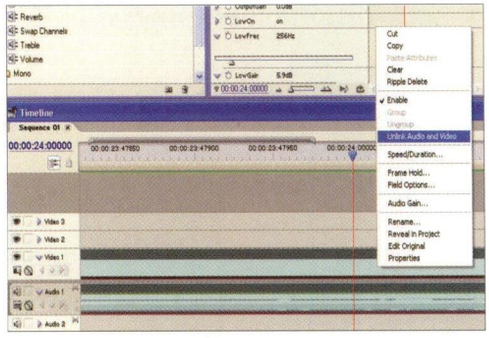
After doing this, drag the file from the project widow in Premiere and on to Audio 4, positioning the clip right at the end. You can't position it on Audio 2 or 3 because there is no equivalent video track attached to the file. See you in part two on the next page...

## Continued...



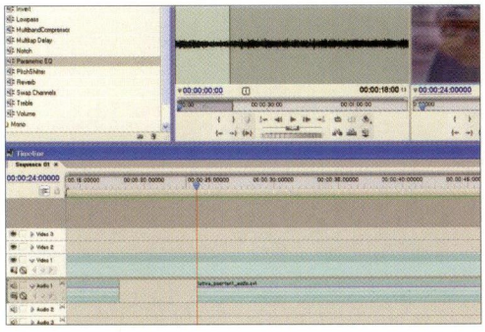
### 10: Editing out the glitch

At 00:24:00 there's a glitch. The audio jumps and we need to mock this out using editing tools. Place the Timeline head at 00:24:00 and zoom in on the Timeline. In the Effects window, hit the selection triangle and then 'Audio units', which changes the frames timecode to six figures for accurate editing.



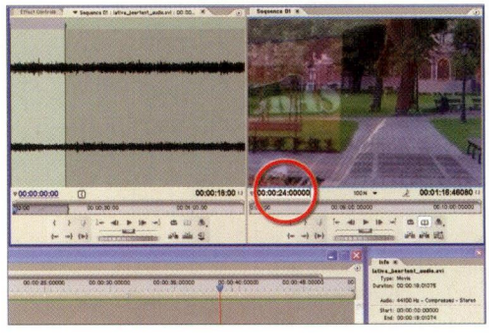
### 11: Unlinking audio

So that we keep the footage intact while editing the audio problem, we need to unlink the audio and video footage. Right-click the Audio track and select 'Unlink Audio and Video'. Make sure the Timeline head is on exactly 00:24:17850, as this is exactly the point at which the glitch occurs.



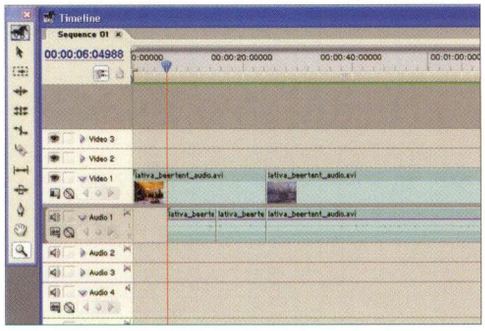
### 14: Slicing out the problem

Use the standard razor tool (using the keyboard shortcut 'C') and cut at exactly this point. Move the Timeline head back to 00:24:17850 and slice here. Pick the select tool ('V' on your keyboard) and select the errant audio segment. Now press delete to remove it.



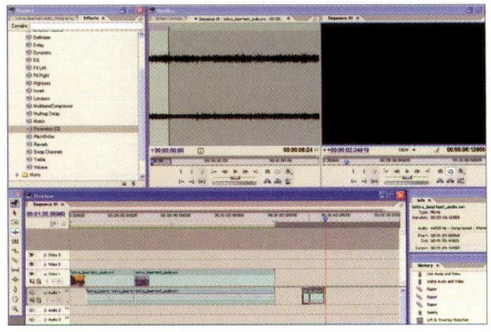
### 15: Audio slicing tip

Moving to specific frames is easy when standard timecode is set. With audio units, you have 50,000 available every second so it's impossible to select accurately using the Timeline head and nudging using the cursor keys. Instead, double-click the timecode in the monitor (circled) and enter it manually.



### 18: Trim to fit

The exact gap, in audio terms, that we have at the start is 06:06988, so we must edit the filler audio from right to left, trimming the start and leaving us with a clip exactly that length. First, you'll need to select the ripple edit tool (using the keyboard shortcut 'R').



### 19: Making ripples

Click the left-hand side of this segment and move it slowly to the right. In the sequence window, the right-hand timecode shows the new length of the clip. When this is as close to 06:06988 as possible, let go of the mouse button and the clip will have been trimmed from the left.

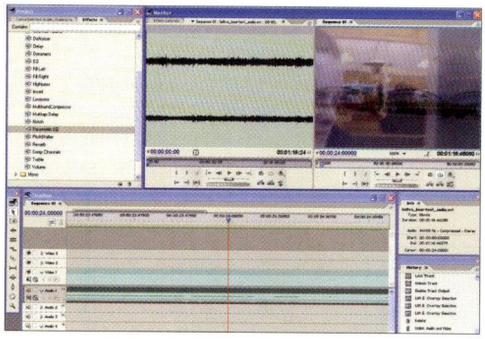
## Get levels right in the first place

Every DV camera with an internal mic can change the microphone's responsiveness to the sound it records. This means you can reduce sensitivity at the start, avoiding mangled audio that even the most powerful software couldn't fix. Select the 'audio levels' setting on your camera. A chart will show either in the viewfinder or on your LCD screen and the audio the mic can hear will be displayed in decibels. Now ensure the loudest audio peak only slightly goes over the displayed equilibrium point at the centre of the levels bar.

■ *Balancing your audio to start with will prevent the need for extensive digital modifications later on (which, remember, are never guaranteed to be a complete success anyway!)*

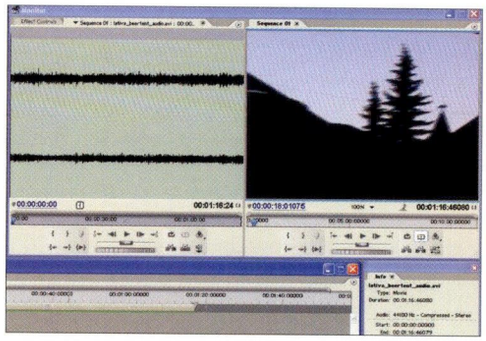


The best resource for Premiere Pro is **www.adobe.com/premiere**, where you can find news, forums and free plug-ins. Another destination is **www.pluginz.com**, a great place for checking out extra plug-ins to enhance compositions. For audio stuff try **www.smartloops.com**, as you can download free loops for use as backing for your footage, or to mix together in audio programs like Cakewalk to make an original soundtrack.



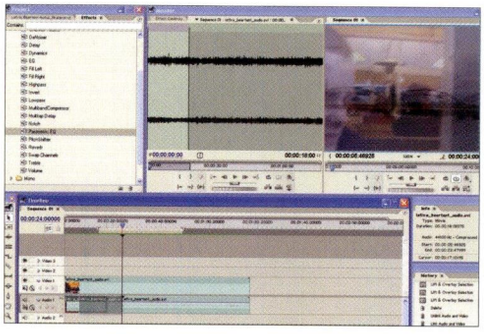
### 12: The method

To make the audio seamless, we must select the entire region the glitch occurs and slide the left-hand part before the glitch to the right to make a full soundtrack. Listen to the points before and after the glitch to find a natural continuation point and remove the in-between. Double-click the audio track.



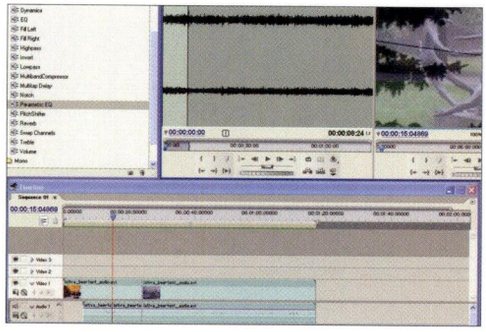
### 13: Shuttle controls

Use the shuttle control to scrub through the footage in slow motion until you find a point at which the natural continuation occurs. The glitch occurs in a verse, so we can't find a continuation by going forward. Going back there's a suitable follow-on at 00:18:12858 – move the Timeline head here.



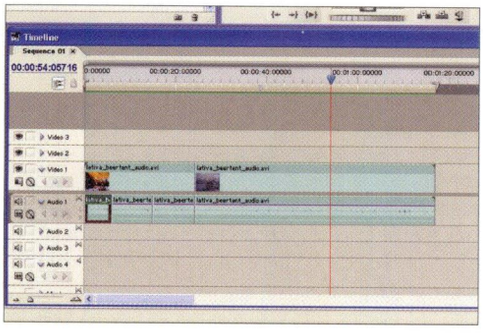
### 16: Get rid of the gap

With the select tool still active, click on the left-hand side of the newly created gap and drag the clipped audio to the right so that it touches the other piece, leaving no gap at all. Scrub through the audio and check that we now have a seamless break. Perfect.



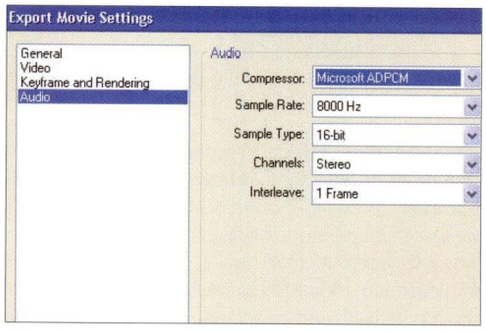
### 17: Filling the front

We now have a big gap at the front to sort out. We could simply clip the video, but that's far too easy an option! Scrub the Timeline head to 15:04869 and razor the audio. Copy the left-most audio segment and paste it ('Ctrl + Shift + V') after the end of the clip for some more editing.



### 20: Filling out the soundtrack

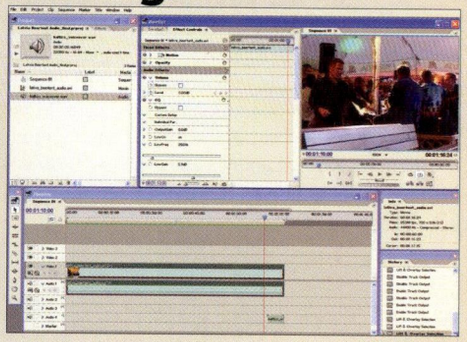
Now simply cut and paste, or drag and drop, the newly resized filler clip in to the available hole and you'll see that we have one seamless piece of audio. The final thing to tackle now is adding the voiceover, for which you'll need to see the two step-by-step boxouts, prior to exporting.




### 21: Final render settings

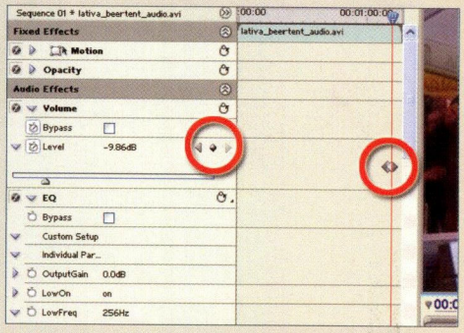
Now click off any active clip in the Timeline and go to 'File', 'Export' and then select 'Movie'. Click the settings tab to select the correct AV CODECs. Set General to 'AVI', Audio to '44.100Hz', 'Microsoft ADPCM' and the video CODEC to 'Indeo Video 5.10' and we're all done!

# Adding a voiceover: editing sound



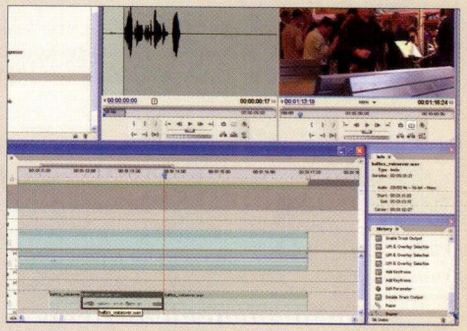
### Providing space

We've set our main audio track levels perfectly, but we need to lower the levels at the end so that our voiceover doesn't get lost in the sax solo with which we finish. Move the Timeline head to 1:10:00, click on the main audio track, open the Effects window and twirl down the volume.




### Keyframing audio

Click the 'add a keyframe' button, which we've circled above, then move the Timeline head to 1:12:00 and add another. With this keyframe still active, reduce the volume level to -10db, which will run through to the end of the voiceover.



### Editing the voiceover

Double-click the voiceover audio track to open it up in the monitor and use zoom to hone in on the small clip in the Timeline. Use the razor tool to clip the empty left and right edges of the waveform and equalize, like earlier, to enhance the final sound.

[ writer: **Poz Hulls** | hardware: **Apple eMac** | software: **Apple Final Cut Pro HD** ]

# BUILD A PICTURE-IN-PICTURE

## Final Cut Pro makes picture-in-picture a breeze

Set up your project as normal, and you'll find that picture-in-picture effects are easy to create

### Flat and transparent

This TV was created in Photoshop. Originally it had lots of layers, but as there was no need for any of the parts to move in this promo, it can be imported into FCP with just one merged layer. It hasn't been flattened though, and it's still a PSD so it retains its alpha channel and the space around it it transparent

### All together

Whether they're created by simple overlays or by complex matte and masks, picture-in-picture allows you to create exactly the video you want. Using a variety of different techniques will bring new life to your editing

### Keeping track

Using different tracks is the basis of all overlay picture-in-picture effects and remember you can 'Control-click' on the Timeline at any point to get another track

### Keyframe capabilities

In our steps, keyframes were manipulated in the Viewer and Canvas. You can also wrestle with the tricky beasts in the Timeline – click here to see them

### The moving image

The four clips used in this picture-in-picture example are all video clips. But any of these images could be stills

**ON THE CD**

*Finished spot.mov*
*Main footage.mov*
*The Logo.psd*
*The TV.psd*

**Probably one of the most talked-about effects from the last few years of TV is the dramatic way that *24* brings its different stories to the screen.** Combining shots from different locations on screen at the same time serves to highlight the show's real-time nature, and makes it very clear that the clock is counting down for protagonist Jack Bauer. But, technically speaking at least, *24* is not unique, and its impact is derived from an editing technique commonly know as picture-in-picture.

The place where this is most often spotted is the TV news. The newsreader fills the bulk of the frame, but a box will appear in the top right-hand corner as the story is introduced, showing the first few seconds of a report. That box will often then zoom to fill the entire screen. Over the following few pages, we'll show you exactly how that effect is achieved – essentially by using different video tracks and by adding keyframes. The project that we're using for this example is a trail for a new slate of programs for a new TV channel. Don't make the mistake of thinking picture-in-picture uncreative though, as there's plenty you can do to jazz it up once you've got the hang of the basic techniques.

In fact, the video you overlay onto your main video doesn't have to be boxed off and obviously not part of the action. In the following steps you'll also find out how you can integrate different moving images inside one another, essentially as another variation of compositing. As always, tracks and keyframes are crucial, so keep your eye on them and picture-in-picture is easy to pull off. So dip into your cover CD and let's get fancy with the footage. ■

CREATIVEPRIMER

## Beefing up your picture-in-picture

When you're using picture-in-picture to create more traditional-looking effects – like those found in TV news programmes or corporate videos for instance – there's still plenty you can do to jazz them up. Remember that transitions can be applied to the inset clips to animate them, and effects can be used to give them a less 'stuck-on' appearance. Think about borders, or softened edges perhaps, or colour correction so that it blends better with its new background. Never forget the potential contained in the 'Motion' tab either, as you can use this to change Opacity, add a Drop Shadow and much more.

YOURGUIDE

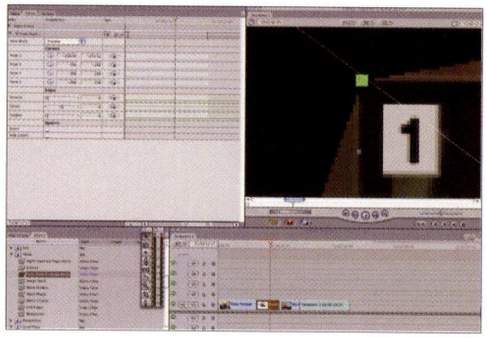
**POZ HULLS** found time during her Film degree to be an active member of the University of Warwick film-making society. Before joining Highbury, she worked for the London Film Festival and was taught screenwriting by Simon Beaufoy (*The Full Monty*) and Lee Hall (*Billy Elliot*). She's now happily ensconced in DV-editing on *DCA*.

# **Step-by-step:** get started with picture-in-picture

Create a fake TV promo and investigate using layers and layers of video

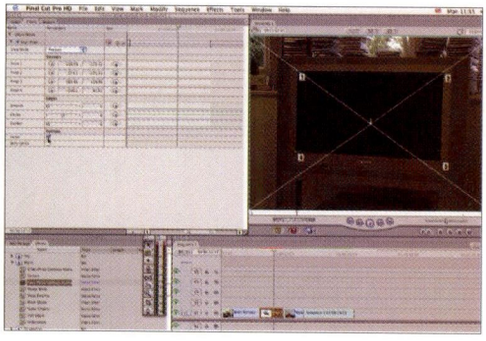
## 1: Fix your footage

Assemble the rough cut of your edit. In this case, all you need to do is import the file 'Main footage.mov' from the cover CD and place it on 'V1'. Move the playhead so it sits on the last frame and go to 'Modify' and 'Make Freeze Frame'. Drag the file created from the Viewer to the Timeline.



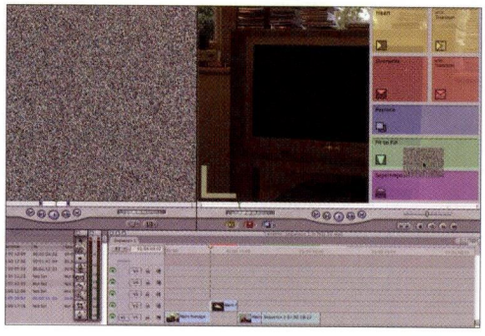
## 2: Make your Matte

One way of compositing two images together is to use a 'Four-Point Garbage Matte'. Select this from Video Filters and drag it onto an image. Click the cross button for 'Point 1' and then directly onto the image to mark where you want 'Point 1' to be. In this case it's the top left corner of the TV screen.



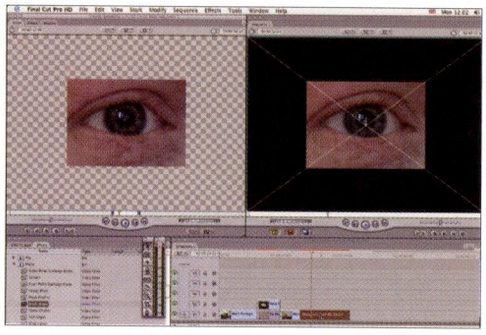
## 3: There's nothing on TV

Tick the 'Invert' options and the selected part of the footage will then be removed from the video, as you can see from the disc footage. If you want to add the filter to the footage anyway you can tweak the Matte, or you can apply it to your own images.



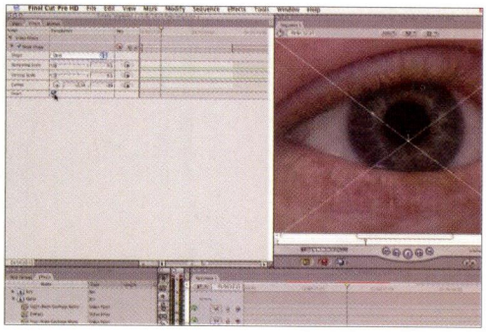
## 4: Static city

To create the static to go on the TV, simply go to 'Video Generators', then 'Render' and finally 'Noise'. Tweak the preset however you like and then drag from the Viewer to the Browser to save. Raise the TV clip up a track and place your TV static underneath so that it shows through the Matte.



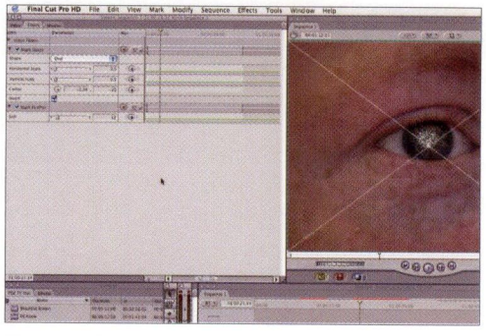
## 5: Round and round

Another way to combine two images in one is to use a 'Mask Shape' filter. Grab this from the 'Matte' folder and apply it to the freeze frame you have already created. The default is a rectangle, so click the 'Filters' tab and adjust so that the Mask is an Oval.



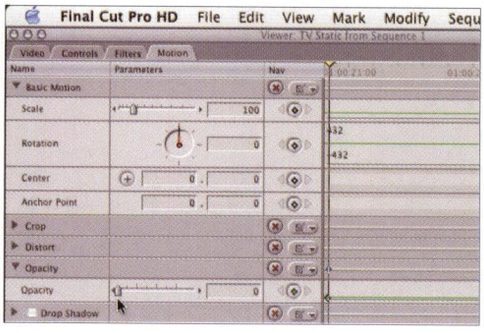
## 6: Mud in your eye

Tweak the 'Horizontal Scale' and 'Vertical Scale' to create a circle that covers everything but the pupil. Click 'Invert' and the image will change so that only the pupil is masked. As FCP automatically gives you a black background it will appear to be no different, but there is now a hole in your video.



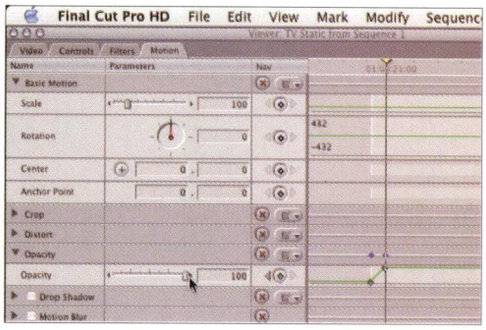
## 7: Tuning out

Again, raise the freeze frame clip so that it is on 'V2' and place the static you have created underneath. This will show through the hole. Add a Mask Feather filter to the freeze frame clip to soften the edges of the mask, and adjust this until you get the static in the eye that you want.




## 8: Over and out

The best compositing happens without the audience even knowing. Although static appearing in someone's eye isn't exactly realistic, you don't want its appearance to grate. Find the first frame of the static and go to the 'Motion' tab. Add a keyframe and lower the 'Opacity' level to '0'.

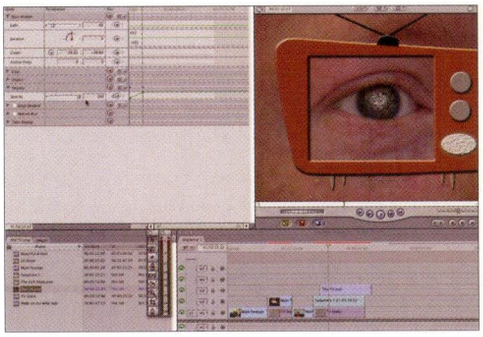



## 9: Bringing the fuzz in

Decide exactly how quickly you want the static to appear, and then drag the playhead until you reach the point where you want the static-eye effect to be totally in place. Add another keyframe in the 'Viewer' and then raise the 'Opacity' slider to '100' as shown above.

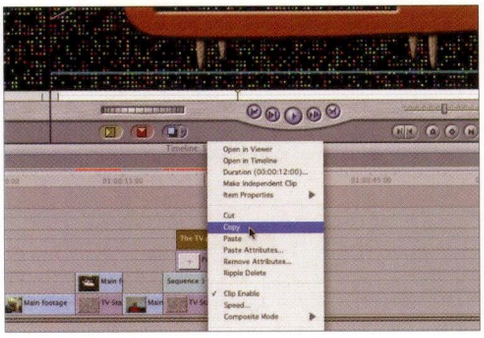
# BUILD A PICTURE-IN-PICTURE

## Continued...



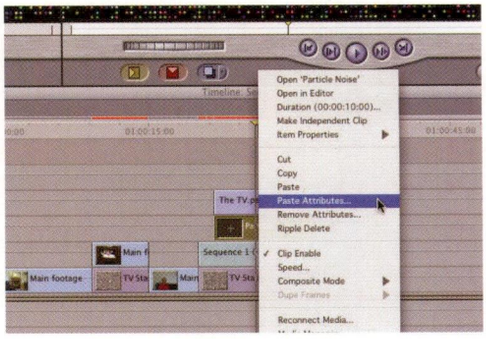
### 10: Big Brother is watching you

This promo needs layer upon layer of images, and lots of fading and cross-dissolving going on. The next element to add is the file called 'The TV.psd'. Drag it to the Timeline and onto 'V4', beginning just after the static has fully appeared. Add similar keyframes to the freeze frame clip, so it fades in.



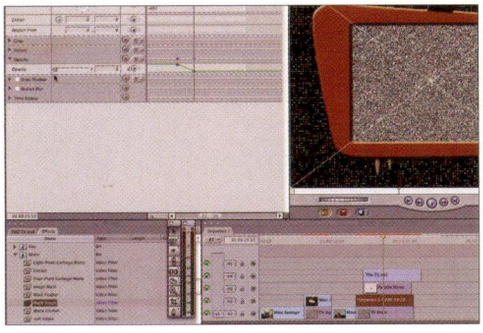

### 11: Pretty colours

Go back to your 'Video Generators' and choose 'Particle Noise'. This allows you to create an animation of colour shapes, as you can see in the background here. Set it up however you like and place it on 'V3', lined up with 'The TV.psd'. To replicate its fade in, simply 'Control-click', 'The TV.psd'.



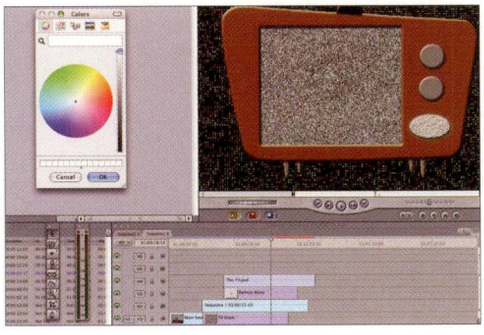

### 12: Be a copy cat

Probably the most useful feature in FCP is 'Paste Attributes', which gives you the ability to copy and paste settings from one clip to another. This can remove the need to create complex animations over and over, although you can still go in and tweak. Select 'Particle Noise' and 'Paste Attributes'.



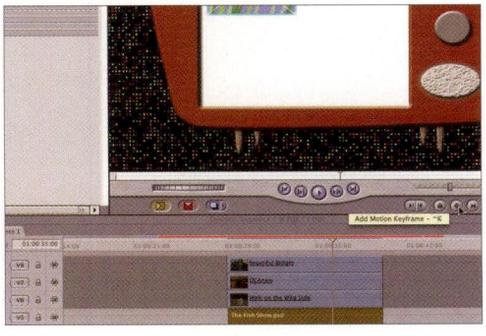
### 15: Eye invisibility

Because of the Mask you have just added, whatever is on the TV appears to be on top of the 'Particle Noise', even though it is on a lower layer. Next you want the 'Static' to swallow up the eye totally – add more 'Opacity' keyframes to the freeze frame so that the eye disappears completely.



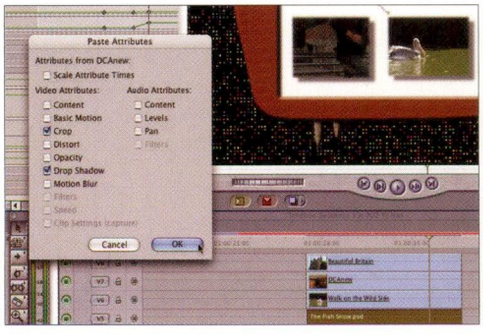
### 16: Static distract

If you think the static will distract from your thumbnails, go to the 'Video Generators' again and create a 'Color Matte'. Use the 'Controls' tab in the 'Viewer' to open up the colour wheel and choose the background you want for your thumbnails. Put the new Matte on 'V1' and add a 'Cross Dissolve'.



### 17: Thumbnail animation

It's time to add your thumbnails. Place them on tracks 5 to 8, ensuring they are the same length. Hide them except the one on 'V5', 'The Fish Show' in this example. Select its wireframe and scale the clip down. Move the playhead three-quarters of the way through the clip and click to add a Motion Keyframe.

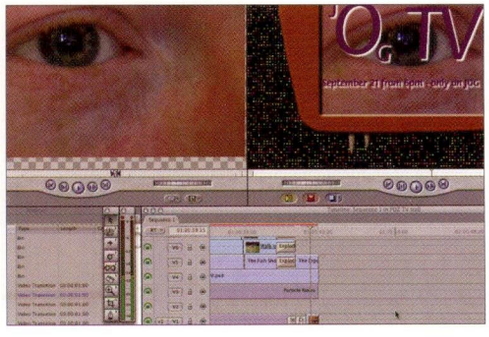



### 20: Paste again

Once you've created exactly the Drop Shadow you want, you can use the 'Paste Attributes' trick to copy it onto the other three thumbnails. As well as helping the thumbnails stand out from the background (especially if you have stuck with the static), they will unify the thumbnails.

### 21: In and out

Now it's time to animate the thumbnails leaving the TV. You can input your own complex animations – remember that you can add effects to personalise – and a very simple way to do this is to add transitions. Here, two have an 'Explode' transition added, while the other two have an 'Implode'.



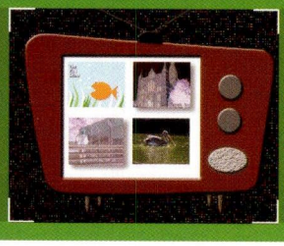
### 22: Colour swap

The promo needs to end with the TV station logo and the return of the eye. Simply 'Cross Dissolve' from the static (or the matte) to the freeze frame clip, and add 'The Logo.psd' on 'V5'. You can make the logo any colour you want by applying filters like 'Levels' and 'Color Corrector' and experimenting.

CREATIVEPRIMER

## The mystery of Composite Modes

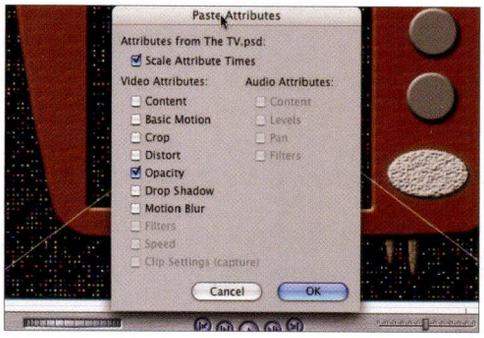
Don't forget the possibilities offered by Composite Modes when you're editing a movie that features picture-in-picture. To access it, 'Control-click' a clip then choose 'Composite Mode'. In this example, the bottom right is set to 'Normal', while the others have a more interesting setting. Top left is 'Hard Light', top right is 'Subtract', and bottom left is 'Difference'. The best way to find out what they do is to experiment, taking into account any factors that might alter them (such as in this case, where they still have Drop Shadows attached).



■ *There are plenty of creative possibilities once you dive into overlays and Composite Modes, and the best way to find out what suits your project best is to experiment*

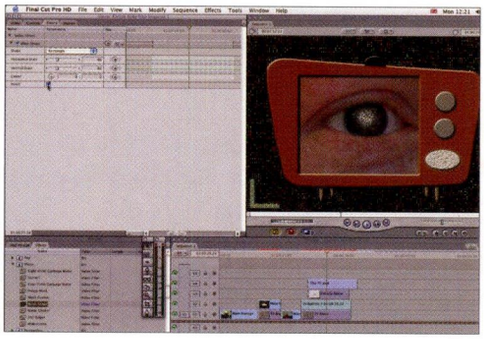
SAYWHAT?

**SUBTRACT:** Basically, Composite Modes combines the colour values of the top layer with the ones underneath. This subtracts the colour values of the top clip from the ones beneath, resulting in a darker top layer.
**DIFFERENCE:** Again, this subtracts, as the colour values from the top are taken away from the bottom.
**HARD LIGHT:** This multiplies the colour, and the result depends very much on the original layer. Most of the effect can be detected in the shadows (if the top layer has any).



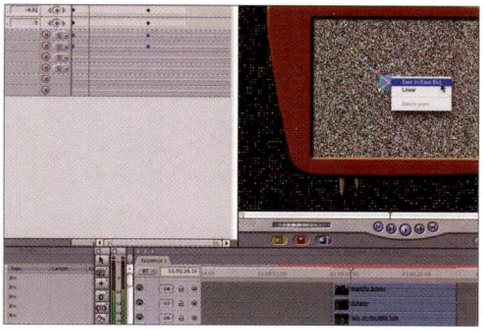

### 13: Lay down the law

The 'Paste Attributes' dialog pops up, and as you can see, only the setting relevant to the clip you are copying from are available. Here the only thing we want to transfer from one clip to the other is the 'Opacity' settings, so select it and leave 'Scale Attribute Times' ticked. Click 'OK'.



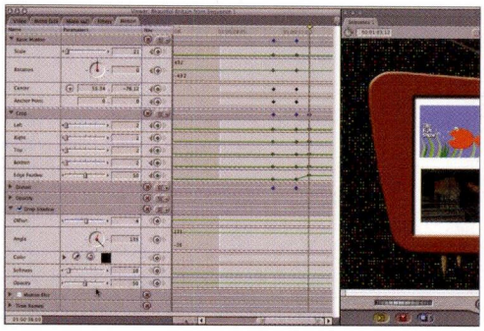
### 14: More Masks

The new 'Particle Noise' clip is supposed to be the background to the scene, but obviously you still want the eye and the static to be on the screen on the TV. Add a 'Mask Shape' to the 'Particle Noise', stick with the default rectangle, line it up to hide the join behind the TV and choose 'Invert'.



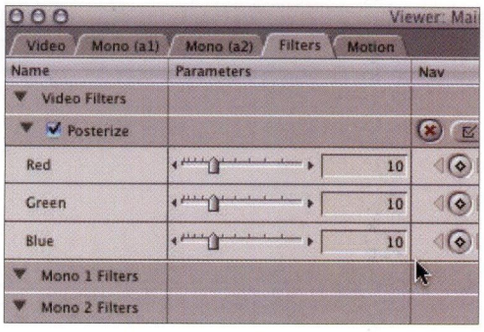
### 18: Back to the beginning

To animate how it got there, move the playhead to the start of the clip, add a keyframe in the 'Viewer' and change 'Scale' to '0'. Ensure the keyframe is bright green (or add another motion keyframe) and move to the centre of the screen. To smooth the motion, 'Control-click' and hit 'Ease In/Ease Out'.



### 19: Four times the action

Make the three others visible in turn, and perform the same procedure. Scale and give them a final position (about three-quarters through) then add keyframes at the beginning so that they grow from a 'Scale' of '0' and move from the centre to their place. Give one a Drop Shadow in the 'Motion' tab.



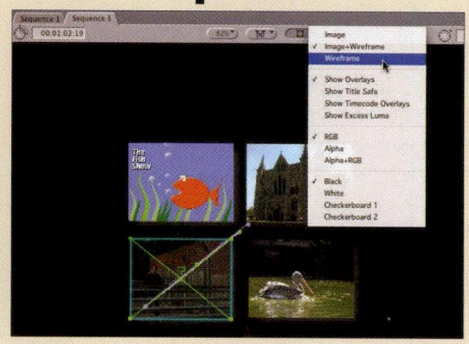

### 23: Play around

The great thing about having all the different elements of your video on different levels is that you can make adjustments to one without affecting the others. This is particularly great when you want to use filters, so try out what happens when you add 'Posterize' or 'Solarize' to the freeze frame clip.

### 24: Time to see

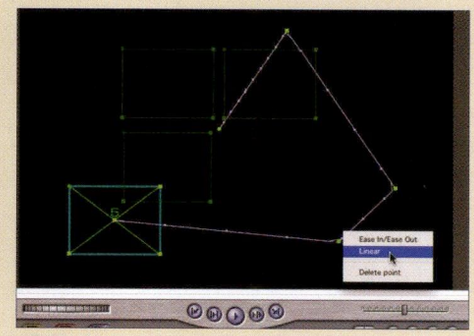
Once you've worked your way through the promo, head up to the 'Sequence' menu and choose to 'Render All' and 'Video'. With all that complex animation you'll probably have to make changes, but once you've got the hang of layers, keyframes and masks then there'll be no stopping you.

# Make perfect motion paths



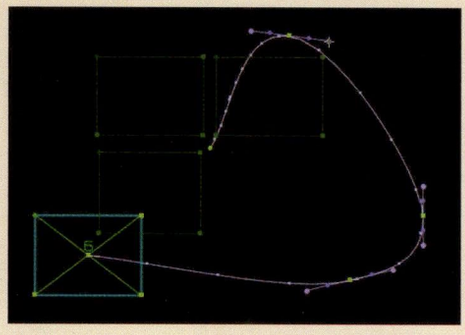

### A view to suit

Animation is essentially a matter of keyframes, and you can manipulate these in the Viewer, the Timeline or the Canvas. For motion keyframes – which make up a motion path – the latter is the easiest. To speed up your computer and simplify matters, choose 'Wireframe'.




### From corners...

While the motion path the thumbnails follow in this project is pretty simple, it doesn't have to be. First create a motion path that zig-zags all over the screen, as the one above. Then 'Control-click' a keyframe and choose the 'Linear' option that pops up to smooth out those angles



### ...to curves

The path will automatically be smoothed, and you can select and drag the handles to create exactly the curve that you want. Remember that you can also pick up the 'Pen' tool, which will let you create new keyframes along the path then move and curve them however you like.

[ writer: Poz Hulls | hardware: Apple eMac | software: Final Cut Express 2 ]

# USE PHOTOSHOP FILTERS IN FCE

## While you can't get Photoshop to wave its magic wand over clips in the FCE timeline, there is a trick that'll allow it to cast its powerful spell from afar

**All non-linear editing packages have collections of filters but, unless you splash out on a pack of expensive plug-ins, they don't come anywhere close to what good old Photoshop can achieve.** Fortunately, there is a way that you can apply Photoshop filters to files in Final Cut Express projects – and not just the still image files either.

To be precise about it, you will be applying the filter to still images, but to so many of them that they'll run together and form smooth video. After all, 24 or 30 frames a second is what video is made up of anyway, so all you have to do is break your clips down into frames and then build them up again. Just think of the possibilities this unleashes: you can apply the 'High Pass' filter, the 'Plastic Wrap' filter or even the 'Patchwork' filter, as we have in the following steps. With the filter on exactly the same settings each time, the video will slot back together in your editing program to form a coherent whole.

If the idea of working your frames in Photoshop really appeals to you, you could even take it further. Say there's an element in a scene that you're having trouble keying or masking out completely. All you have to do is take it into Photoshop, clone it out perfectly in every frame and no one will ever be any the wiser. Of course, that could well be hundreds and hundreds of frames to churn through,but the option is there if you're willing to take it.

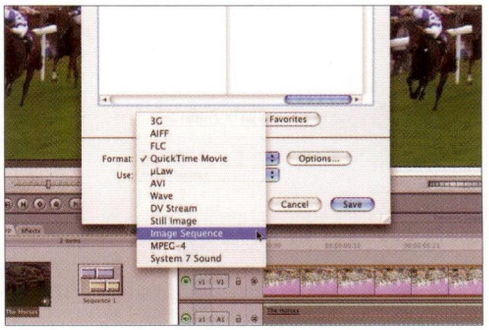
As with any other part of the creative world, Photoshop can make your images more exciting, more colourful, or more anything else you might care to name. It doesn't make any difference to Photoshop that the images in question are moving ones. ■

**Step-by-step:** apply photoshop filters to video footage

Use the power of Photoshop to enhance your imaging experience

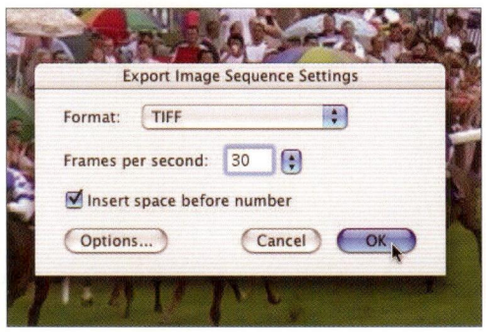
### 1: Export options

Obviously Photoshop can't import and add filters to ordinary video footage, so to get it into a format it can read and understand you must export it correctly from FCE. To do this, head to the 'File' menu and choose 'Export' and then across to 'Using QuickTime Conversion...'.



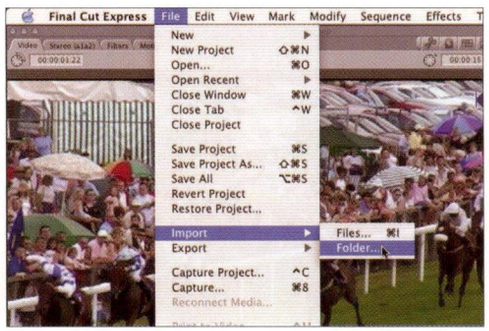

### 2: Building blocks

As video is simply made up of lots of still frames (24 per second for film, remember), the way to trick Photoshop into working on it is to break it up into still frames again. When the window pops up, just select 'Image Sequence' for the 'Format' and click 'Options'.




### 3: Space and time

Depending on what sort of filter you want to apply to your footage, you will need the images to contain either more or less information. In this example, assume that you need to retain a decent amount of detail and pick 'TIFF' and then '30' for the frame rate. Now click 'OK'.




### 4: Back and forth

Go into Photoshop and apply the filter you want – with exactly the same settings – to each one of your still image files. Use the 'Automate' command to help speed things up. Once that is completed, return to FCE and go to the 'File' menu, choose 'Import' and then select the whole filtered folder of images.

### 5: Home sweet home

The files will appear in the 'Browser', so double-click to see them in the 'Viewer'. Since they were named by FCE's export process they are all in order. Select them all and then drag them together to the 'Timeline'. They will all appear there, still all in the correct order.

### 6: Cut down to size

At the moment, the only thing stopping the video playing smoothly is that each clip is too long. With them all still selected, 'Control-Click' them and the usual menu will appear. Choose 'Duration', and the dialog will pop up. Enter '00:00:00:01', click 'OK' and then enjoy your filtered footage!

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- Go beyond the manual with top sequencing techniques

[ writer: **Poz Hulls** | hardware: **Apple eMac** | software: **Final Cut Express 2** ]

# CREATE A CAMERA TRANSITION

## Don't be satisfied with using default transitions. Instead, make your own – starting with our straightforward camera flash transition

**Anyone who thinks editing is just a matter of slapping clips on tracks simply isn't doing it right. Editing is an art, and the more time you take with it, the better your results and the more you'll learn.** It is a thoroughly creative pursuit – no matter how easy software like Final Cut Express makes it – and if you take pride in your work then you will certainly be rewarded in terms of satisfaction.

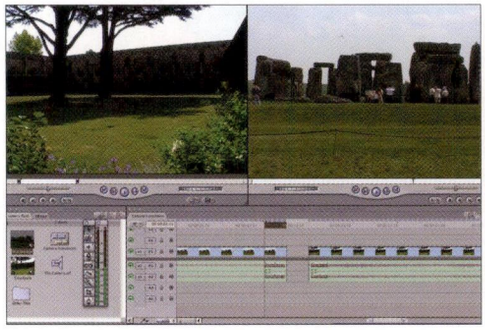
Every element of your movies needs to drip with your enthusiasm for the project, and what better way to do that than to create every single element yourself? Although many people shoot their own footage, create their own titles and even tweak the effects to achieve exactly the look they desire, they still slap on the same tired old transitions without a thought. Creating your own transitions will really enhance whatever mood your movie is trying to create, and it's not as difficult as you might think.

Don't imagine that creating a transition is something that requires scripting knowledge or the ability to create plug-ins. After all, a transition is just a graphic element (or even an audio element) that allows you to get from one clip to another, so there is no reason you can't combine a default transition with a graphic element of your own to make that happen. In this example, we are going to mimic a photo being taken to get from one clip to the next. There will be a flash of white and the appropriate camera sound too.

Once you've mastered this, remember that you can import any graphics you whip up in Photoshop, so you could create a camera iris or a theatre curtain, or you could combine a filter and a transition and have the second clip appear to be blown on screen. In fact, transitions can be as wild as your imagination allows. ■

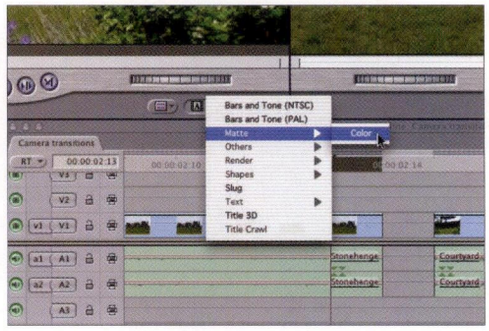
**Step-by-step:** create a transition of your very own

Developing an original transition will make your movie unique



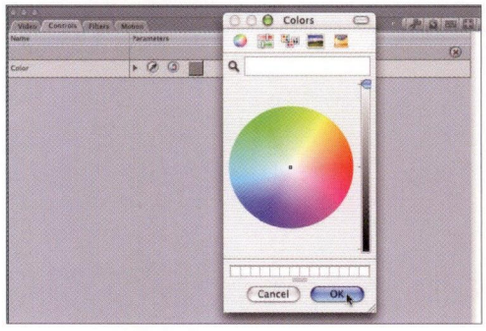
### 1: The line-up

Open up Final Cut Express and import the three files from the cover CD. Obviously you can use this transition between any of your own images, but this will let you practice and hone your transition skills. Take both clips to the 'Timeline', with a gap of one frame between them.



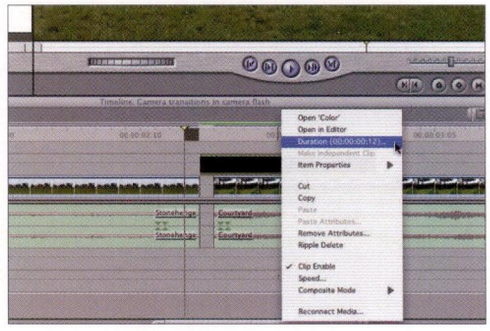

### 2: Make a Matte

Click the handy button at the bottom right of the 'Viewer' and the options for the files you can create within Final Cut Express (collectively called 'Generators') will appear. Choose 'Matte' then 'Color' and the choice will appear in the 'Viewer', ready for you to edit it into shape.



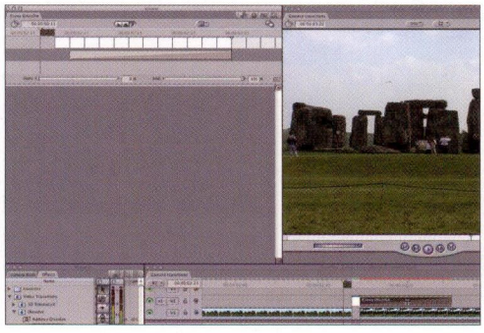

### 3: All white

Click the 'Controls' tab in the 'Viewer' and click in the square of grey that represents the default colour. The 'Colors' dialog will pop up, so change it to white, click 'OK' and go back to the 'Video' tab. Drag the thumbnail into the 'Browser' to save your white clip.



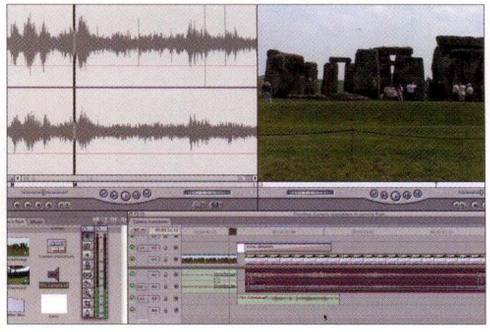

### 4: Say cheese!

Drag your white matte to the 'Timeline' and place it on the second video track. Position it so that it begins as the first clips ends and fills the break between the clips with pure white. Shorten it to around 12 frames, or 'Control-Click' the clip and select 'Duration' to do this.



### 5: Extend the transition

Drag a 'Cross Dissolve' onto the end of the white matte. Double-click the transition and it will appear in the 'Viewer'. Extend the transition so it goes over all of the white matte except the first frame. This will simulate the camera flash between the two clips.



### 6: Make some noise

Finally, add the audio file 'The Camera.aif' to the third audio track. This contains the noise of a picture being taken, so it needs to be lined up with the flash of the first frame of white. Lower the 'Level' of the other audio clips if need be, so that everything forms a smooth, coherent whole.

**ON THE CD**

*Courtyard.mov*
*Stonehenge.mov*
*The Camera.aif*

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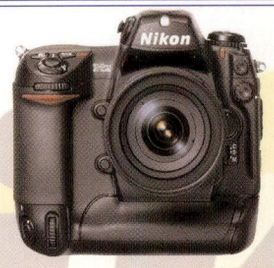

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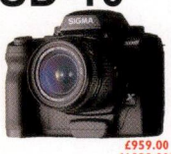

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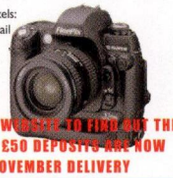

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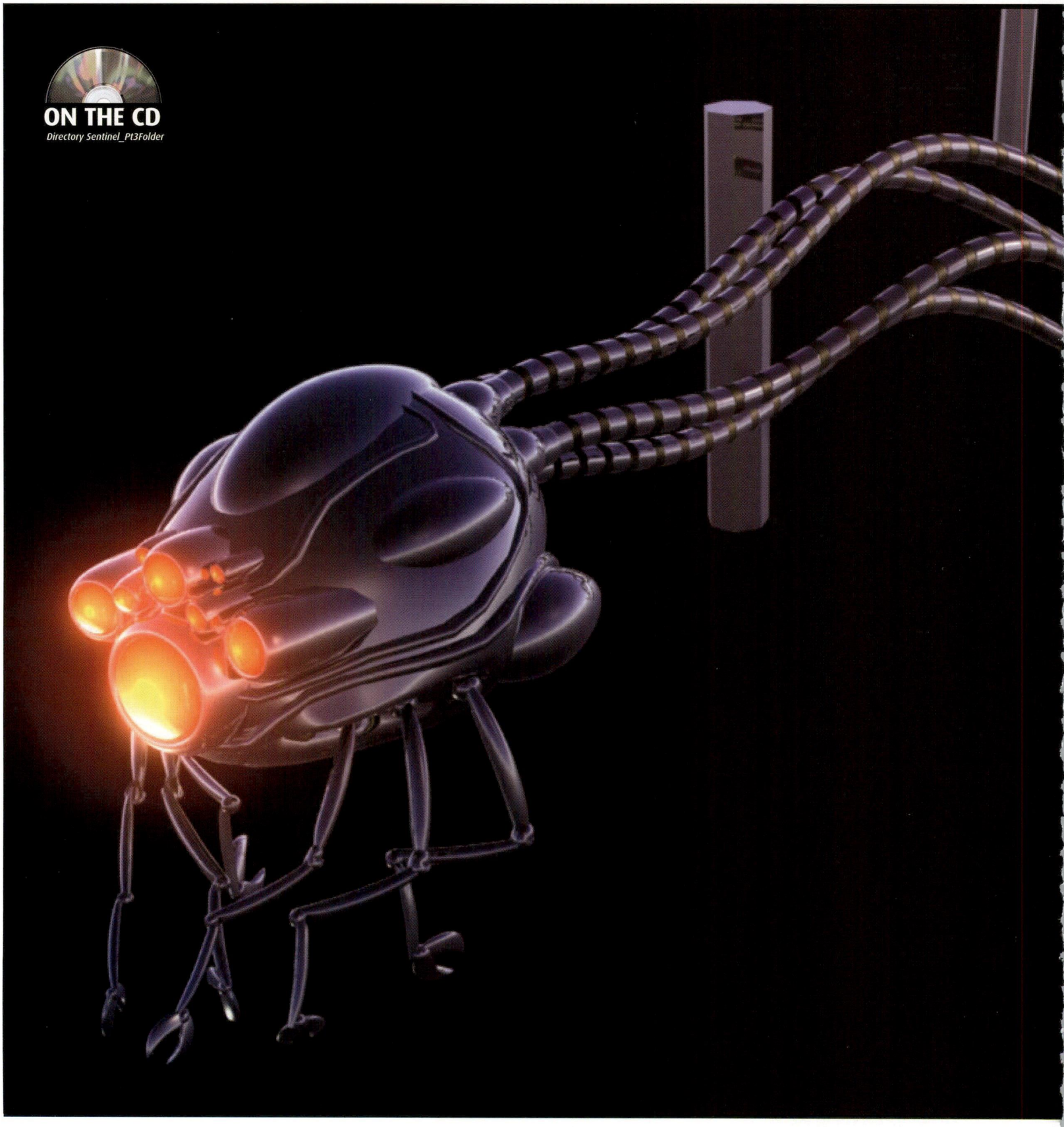
# MAYA MASTERCLASS: PART THREE

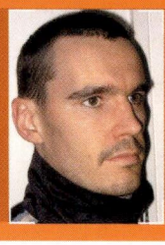


## WEBRESOURCES

Once you've finished your Sentinel and want to get your teeth into more modelling and animation with Maya, then the Internet is the perfect place to turn. Try **www.highend3d.com/maya/tutorials/sharktacos1/index.3d** if you fancy a pretty tricky cat animation project, and **www.alias.com/eng/community/tutorials/index.jhtml** if you want to ease your way in more gently with some more beginner stuff. Other great sites that feature information on the principles of character animation can be found at **www.tutorialized.com/tutorials/Maya/Character-Setup/1** and **www.anticz.com/animatio.htm**.

## YOURGUIDE

**SIMON DANAHER** is an acclaimed 3D artist and designer, and has written several books on 3D graphics and 2D design including *Digital 3D Design* and *The Complete Guide To Digital 3D Design*. He is also a musician and manages to find time to record and perform with The Macombees (**www.macombees.com**).



■ *This astonishing looking Sentinel will finally be animated in this month's workshop, and will gracefully weave through the obstacles in its way – just like you will with this handy guide!*

# Now it's time for all the hard work to pay off as you finally bring your Sentinel to life by animating it

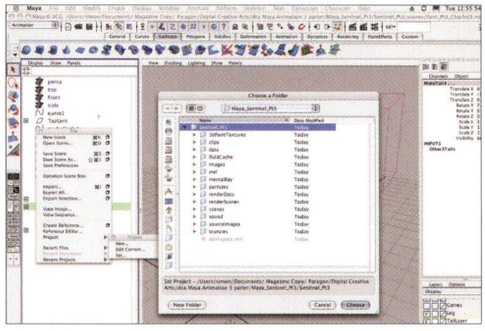
**Last issue we completed the second part of making an animation from scratch in Maya, and in this final instalment we'll look at the animation process itself.** Though we're creating this in the full version of Maya you can still follow the fundamentals using Maya PLE on the cover CD.

Maya offers a number of tools for creating and managing animated objects, and one of the most important is the Character Set. This lets you create groups of attributes that can be animated so they can be easily selected and keyframed. These sets are independent of any hierarchy you may have created on your character model so you can arrange and group sets and subsets as you like. With a set you don't have to chase an attribute through the interface, finding and selecting objects in the Outliner and multiple-selecting attributes whenever you want to set keyframes.

Other tools include the Graph Editor that adjusts keyframe interpolation, and Trax – a powerful animation blending system. We'll look at how to set up the character's attributes into sets and then keyframe them to bring the character to life. If you're new to Maya, watch the 'Learning Maya' movies that come with PLE to get to grips with the basic tools. ■

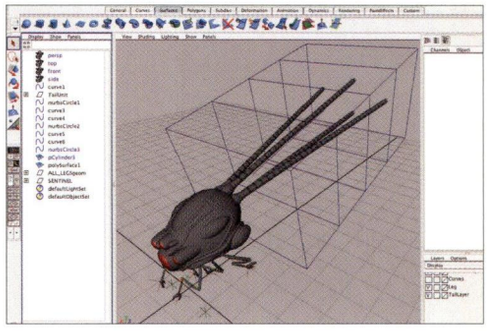
# Step-by-step: let's get animated

**The model is built and rigged, so it's time to give it some movement**



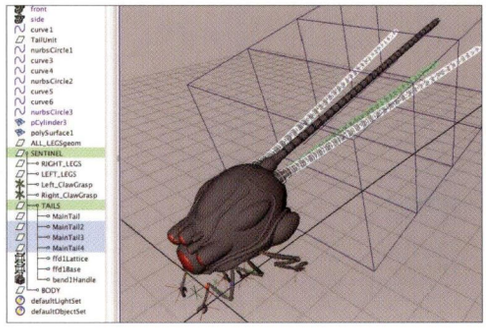
## 1: Setting up

Before you begin, copy the folder 'Sentinel_Pt3***' from the cover CD to your hard disk. In Maya choose 'File,' 'Project', 'Set...' and then navigate to and select the folder you copied and click 'OK'. You're now ready to begin the final part of this Maya workshop.



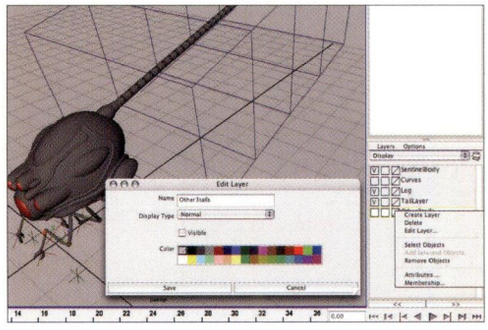
## 2: Recapping

Now when you open or save files they will be saved to the project folder. Open the file 'Sent_Pt3.mb***'. This is the Sentinel where we left off last month (but without any of the test animation). First, though, we need to do a bit of housekeeping.



## 3: Keep it snappy

Because the tail contains many polygons the screen display and interaction will be slow, so we can hide all but one tail to speed things up. Select 'Perspective/Outliner' view and open the 'SENTINEL' hierarchy then the 'TAILS' hierarchy and 'Command, click' to select tails 2, 3 and 4.

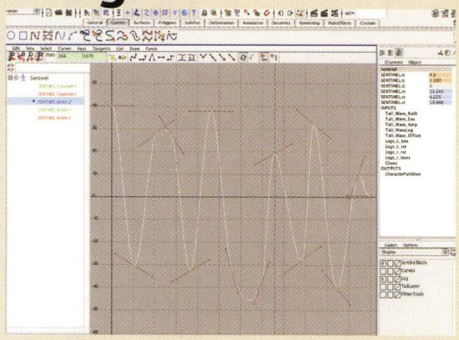


## 4: Layer it on

In the 'Layers' panel (bottom right) create a new Layer ('Layers', 'Create Layer' in the Layers panel's own menu). Right-click on this layer and choose 'Add Selected Objects'. Click the 'V' icon to turn off the visibility of the three tails, then double-click the layer and rename it 'other3tails'.

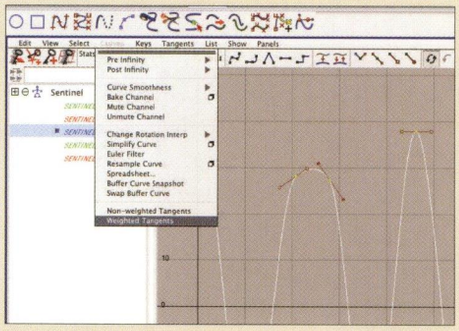
# MAYA MASTERCLASS: PART THREE

## Function Curve Weights



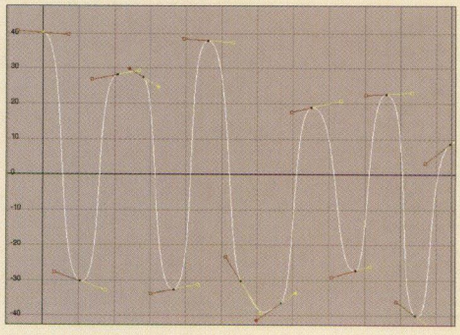
### A weighty issue

By default the Function Curves have Handles that are non-weighted. That means their lengths cannot be changed. This is fine most of the time, because it keeps the animation smooth and without any unpleasant jarring motions.




### Heavy, man

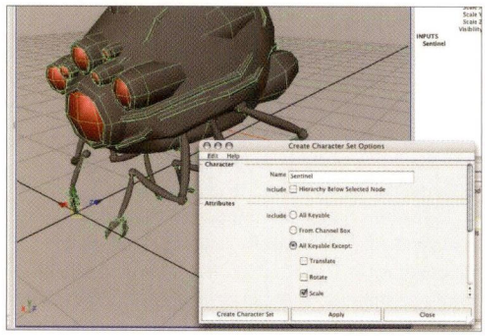
By selecting all the keys on a Curve (or some of them) and choosing 'Curves', 'Weighted' you can alter the length of the Handles to change the timing of the interpolation. The Handles change to bigger dots and you can begin to manoeuvre them.



### Smooth ride

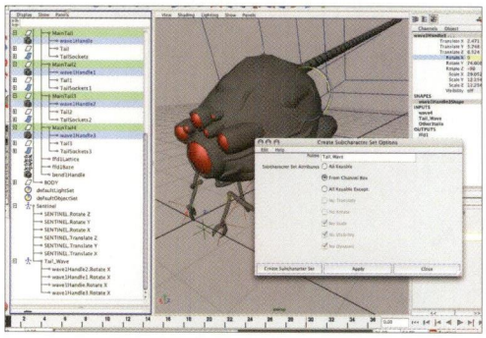
Selecting and moving the Tangent Handles makes the Curve more 'bumpy' and less 'spikey' which has the effect of making the animated parameter jump more abruptly between keys. This is handy on the banking of the Sentinel.

## Continued...



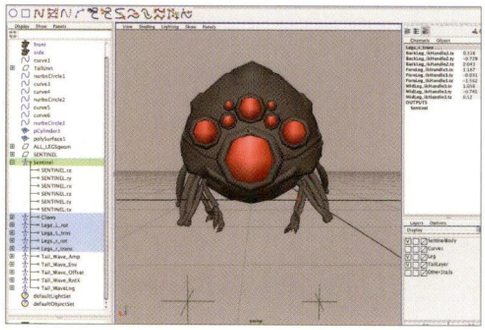

### 5: Set piece

In the 'Outliner' select the 'SENTINEL' item. In the 'Animation' menu set ('F2') choose 'Character', 'Create Character Set' [options box]. In the new panel enter the name 'Sentinel', make sure that 'Include Hierarchy Below...' is unchecked. Check 'All Keyable Except Scale' and click 'Create Character Set'.



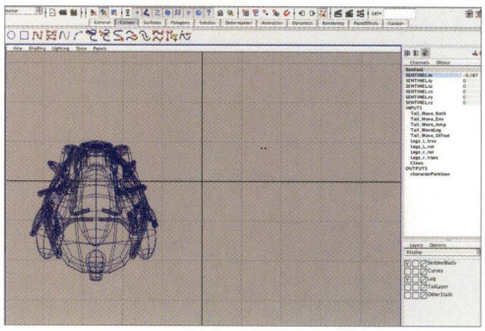
### 6: Subset and match

A new Character node entry in the Outliner ('Sentinel') contains the Translate and Rotate attributes. To create a subset open 'SENTINEL' and 'TAILS'. In each tail group 'Command, click' to pick 'Wave1Handle'. In the Channel box click 'Rotate X' (the name, not the value), pick 'Character', 'Create Subcharacter Set'.



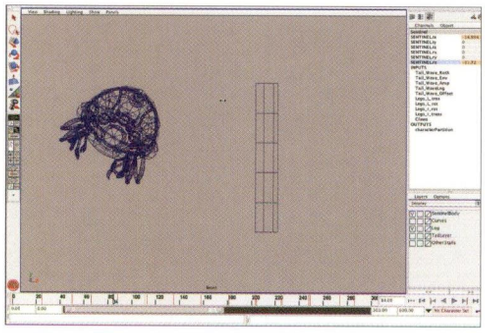
### 9: Locator, locator, locator

Repeat, creating subcharacters for the 'Amplitude', 'Wavelength' and 'Offset'. Now we can animate all four tails' Wave Handles more easily. We have also created subcharacter sets for the leg Locators and claws in the same way.



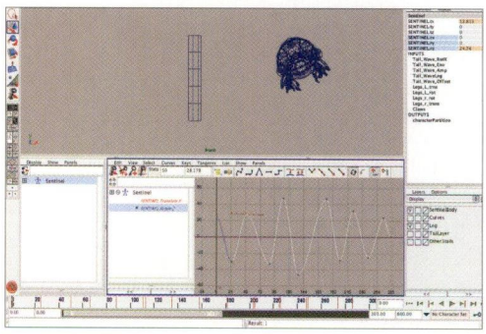
### 10: Slip 'n' slide

To put obstacles in the Sentinel's path, open 'Sent_animA1***' from the 'Scenes' directory. Switch to 'Top' view to begin keyframing. Select the Sentinel character set in the Outliner. Click 'SENTINEL.tx' in the Channel box and middle-drag in the viewport. Maya's virtual sliders will control the character now.



### 13: Variety is the spice

Notice that we occasionally made the Sentinel pass two obstacles at a time for variation. Now we can switch to 'Front' view and keyframe the 'SENTINEL.rz' attribute to make it bank on each turn. Move the time slider and keyframe the Sentinel rotating in 'z' alternately as it swings left and right.



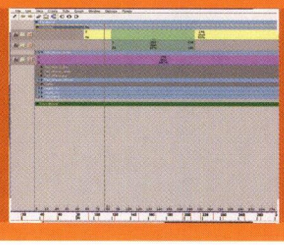
### 14: Use the Graph Editor

You can view the keyframes in the Graph Editor by choosing 'Panels', 'Saved Layouts', 'Persp/Graph/Outliner'. Select the attribute you want to view, press 'A' to fit it in the view. You can select (left-click) and move the keyframes (middle-drag) to edit the motion of the Sentinel. See 'Sent_AnimB.mb***'.

CREATIVEPRIMER

## On the right Trax

The Trax window works with animation clips. These are displayed as horizontal bars, and you can move and scale them to offset or speed up/slow down the animation. Trax lets you blend together multiple animation 'Clips' to form a final animation. You convert keyframed animation in to a Clip then it can be scaled and looped in Trax and blended with other clips. You can blend, say, a character walking into a clip when it's running – Trax will smoothly interpolate between the two animations to create a seamless result.



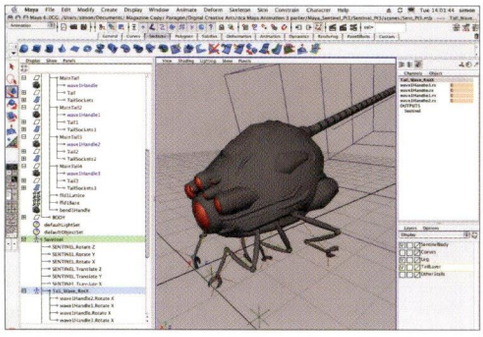
*The Trax editor is the focal point for animation in Maya and gives animators new ways to edit, combine and repurpose animation data*

SAYWHAT?

**KEYFRAMES** – are simply snapshots of the state of a particular attribute at a particular frame. When two or more keyframes are recorded Maya can interpolate between them creating all the frames in between for you.

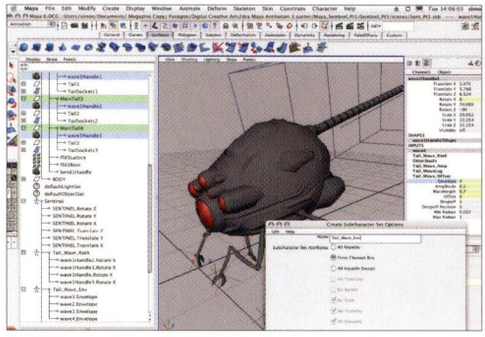
**ATTRIBUTE** – this is a property of an object that you can animate in Maya, such as the rotation or translation.

# IK Handles and Constraints



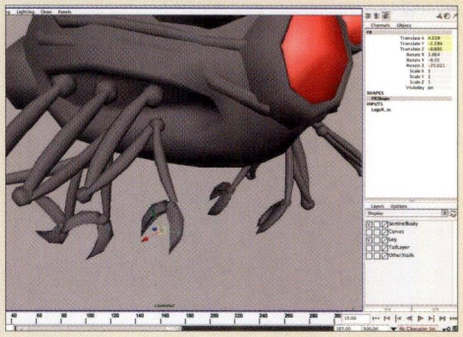
## 7: Subcharacters

Name this 'Tail_Wave_RotX' and select the 'From Channel Box' option and click 'Create...'. We have selected the objects we want to control, then selected their attribute and created the subcharacter. A new subcharacter containing those attributes is created in the Outliner.



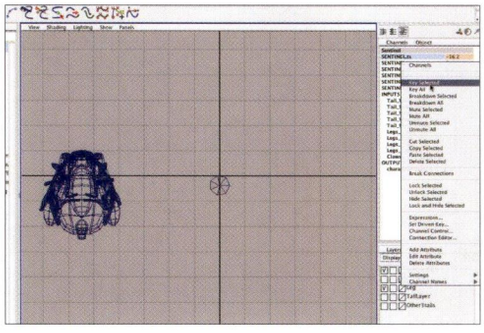
## 8: Give us a wave

With the Wave Handles still selected look in the 'INPUTS' section of the Channel box and select the 'wave4' node (or 'waven' where 'n' is the number of the last handle you selected). Its attributes will be displayed below it. Select the 'Envelope' attribute and create a subcharacter 'Tail_Wave_Env'.



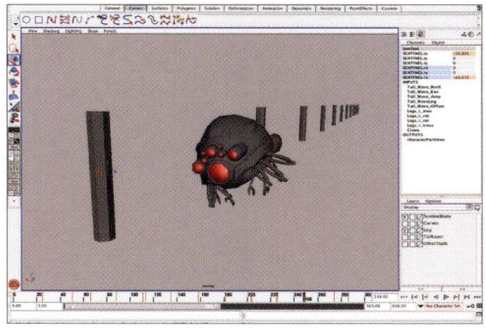
## Tied up

To animate the legs we have to use Constraints because Maya doesn't like IK Handles being animated directly while they're grouped to an animated Locator. There's an easy way round this, though. Create a new Locator and move it near the the right front leg's IK Handle.



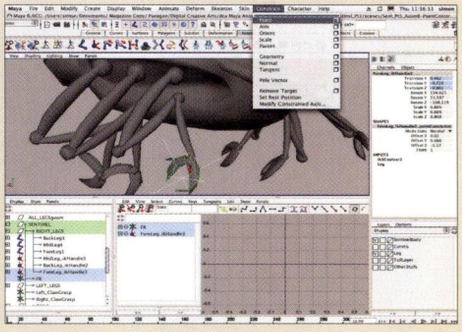
## 11: Moving time

Move the Sentinel to the right then right-click the 'SENTINEL.tx' attribute and choose 'Key Selected' from the popup. This is how we set keyframes for a selected attribute. Drag the time slider until the first obstacle lines up with the Sentinel (near frame 23). Put the Sentinel to the left of the obstacle and keyframe it.



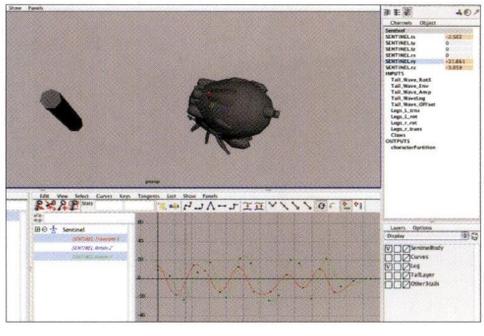
## 12: Dodge and weave

Scrub the timeline. The Sentinel will dodge the first obstacle. Move the slider forward until the second obstacle is in line, then move the Sentinel back to the right. Keyframe it. Keep keyframing to make the Sentinel weave through the obstacles. Play the animation to watch this (see 'Sent_AnimA2.mb***').



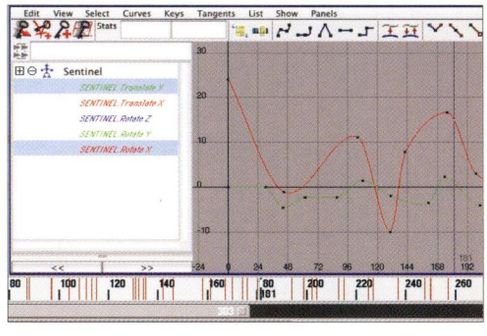
## Get a handle on things

In the 'Outliner' select the 'Locator' then 'Command, click' the right front Leg's IK Handle (the selection order is important). Choose 'Constraint', 'Point' from the 'Animation' menu set ('F2'). If you select just the 'Locator' and move it you'll see the leg following. Call the Locator 'FrontLegR'.



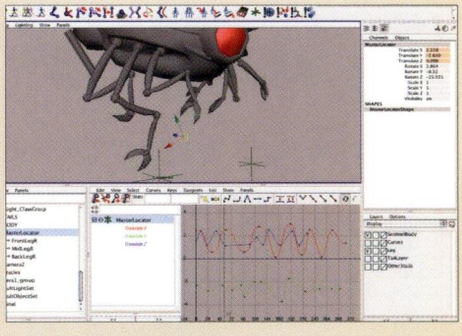
## 15: Take the turn

You can keyframe the 'SENTINEL.ry' attribute to make the Sentinel head into the turns slightly. Using the Graph Editor adjust the timing of the animation to get the best 'feel' for what the character is doing, adding extra keys to help control the motion if necessary. See the file 'Sent_AnimB2.mb***'.



## 16: Up and down

If you want you can add some subtle up-and-down motion to the Sentinel by keyframing the 'SENTINEL.ty' and 'SENTINEL.rx' attributes too. Note that you can view more than one graph at once by 'Command-click'ing the attributes in the Graph Editor list.

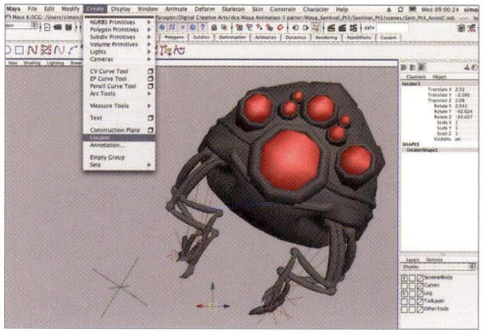


## Obey the Master

Repeat for each IK Handle, giving them names. Now all of the Locators can be middle-dragged and dropped into the Master Locator in the middle of the legs. We can keyframe the Master Locator to animate the legs as a whole, while also animating the legs individually using their Locators.

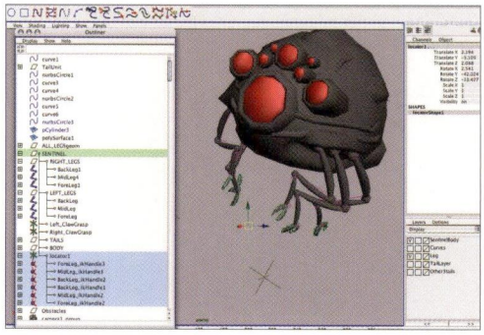
# MAYA MASTERCLASS: PART THREE

## Continued...



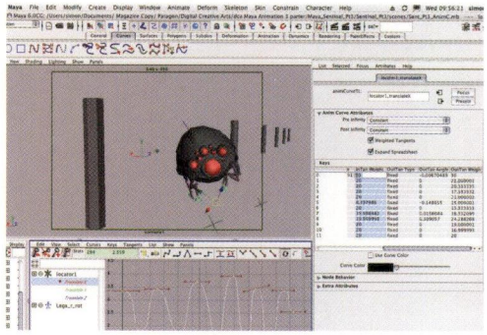
### 17: Nice legs

We want to be able to control all the legs as one so they swing as the Sentinel turns. We need an extra control for this, so go to frame 0 and add a Locator ('Create', 'Locator'). Move the Locator to below the Sentinel, between the legs (select the Sentinel and press the 'F' key to centre it if necessary).



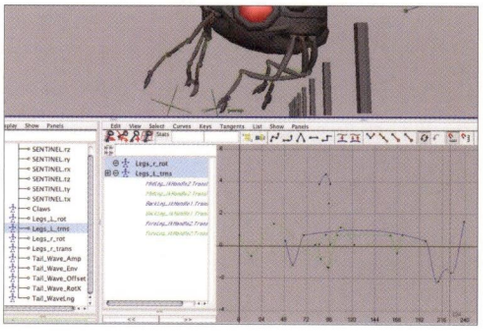
### 18: What a drag

In the Outliner (ensure 'Show', 'Show All' is selected) middle-drag the Locator into the SENTINEL group so it moves with it. We created some Locators with Point Constraints on the leg IK Handles (see the boxout on page 77), so select them all and middle-drag them into the main Locator.



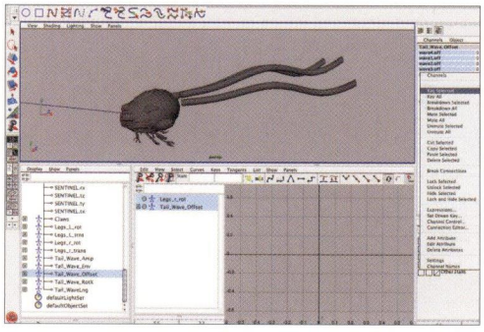
### 19: Sway with me

Now you can animate the legs swaying as the Sentinel turns by keyframing just the one master Locator. Here's the graph of our animation. To make the swaying more abrupt change the 'tx' keyframe Handles to Weighted ones and use the Spreadsheet to increase the lengths of the Tangent Handles (see page 76).



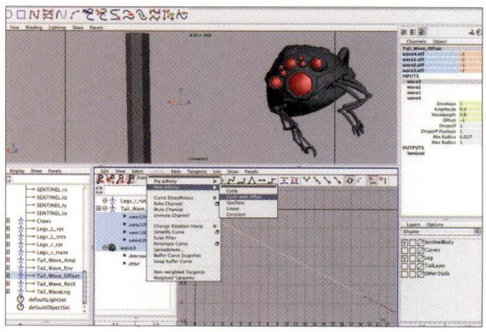
### 20: Legs eleven

Note that we still have independent control of the legs using the character sets we created earlier. Using these sets we can add some extra independent leg movement by keyframing the various translation attributes in the Channel box. See the file 'Sent_AnimC.mb***'.



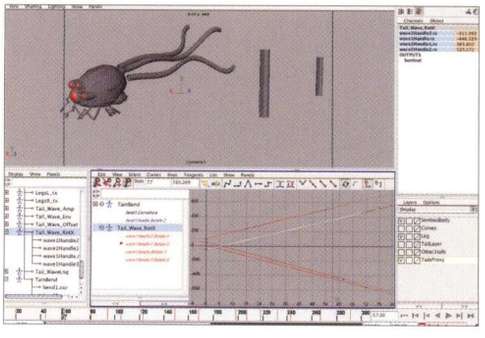
### 21: Tail end

The tricky bit is going to be the tail. There are low-resolution proxy objects for the tails to make the display faster while animating. To make them visible click the box in the TailProxy Layer ('Layers' panel). Click the 'Tail_Wave_Offset' character set and set a key for all four 'wave.off' attributes at frame 0.



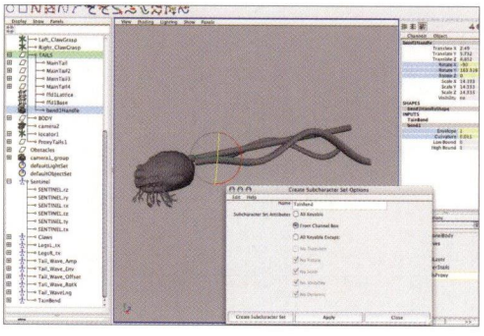
### 22: Shake it

Go to frame 20 and change the offset values to '-1' and set another key. In the Graph Editor choose 'Curves', 'Post Infinity', 'Cycle With Offset' – this makes the offset value increase at the same rate forever. If you play the animation the tails will wiggle nicely.



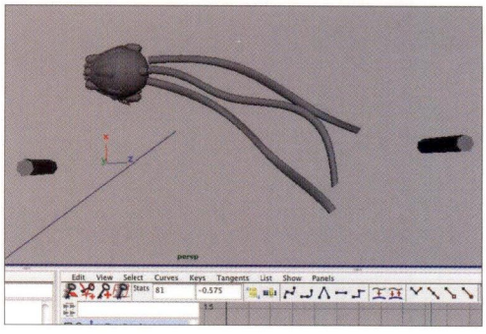
### 23: You've been framed

Select the 'Tail_Wave_RotX' character set and keyframe all four attributes at frame 0. Go to about frame 60 and keyframe again. In the Graph Editor move some of the keys at frame 60 upwards, some downwards, and enable 'Cycle With Offset' for all four. This makes the tails rotate.



### 24: Bend it

To stop the tails penetrating the obstacles they're attached to an FFD Deformer which is deformed by a Bend Deformer. The Bend Deformer is in the TAILS group by the FFD. Create a character set with the 'bend1Handle' rotate attributes and 'bend1' Envelope and Curvature attributes (under 'INPUTS', 'Channel Box').



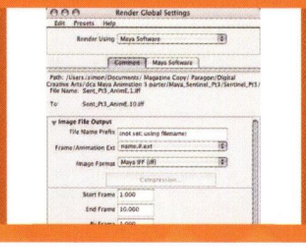
### 25: Swing of things

In the 'Top' view keyframe the Curvature attribute of the Handle to make the tail swing in sympathy with the motion of the Sentinel, and to help avoid each of the obstacles. This will make the Sentinel look more 'organic'. See the file 'Sent_AnimD.mb***'.

CREATIVEPRIMER

## Rendering

To render the whole animation you need to run the Batch Render command. This will only work properly if you have set the correct file-naming mode in the Render Globals. It has to be one that has a number and extension. On the Mac you can choose to save directly to a QuickTime animation format, but it's best to save as individual frames, then use the Fcheck application that comes with Maya to view and export the animation.



*If you wish to render a sequence in Maya, all the parameters for this are stored in the Render Globals window*

SAYWHAT?

**LOCATOR** – in other apps these are known as Null objects. They are objects that have no associated geometry so do not render. These are useful as control objects when animating.

**FUNCTION CURVE** – this is a curved line that runs between keyframes in the Graph Editor. It shows how the keyframed data changes over time.

# The animator's essential tools

**Having got this far in the workshop, you'll no doubt be familiar with most of Maya's tools, but there are a few that are particularly useful when it comes to animation...**

### Graph Editor

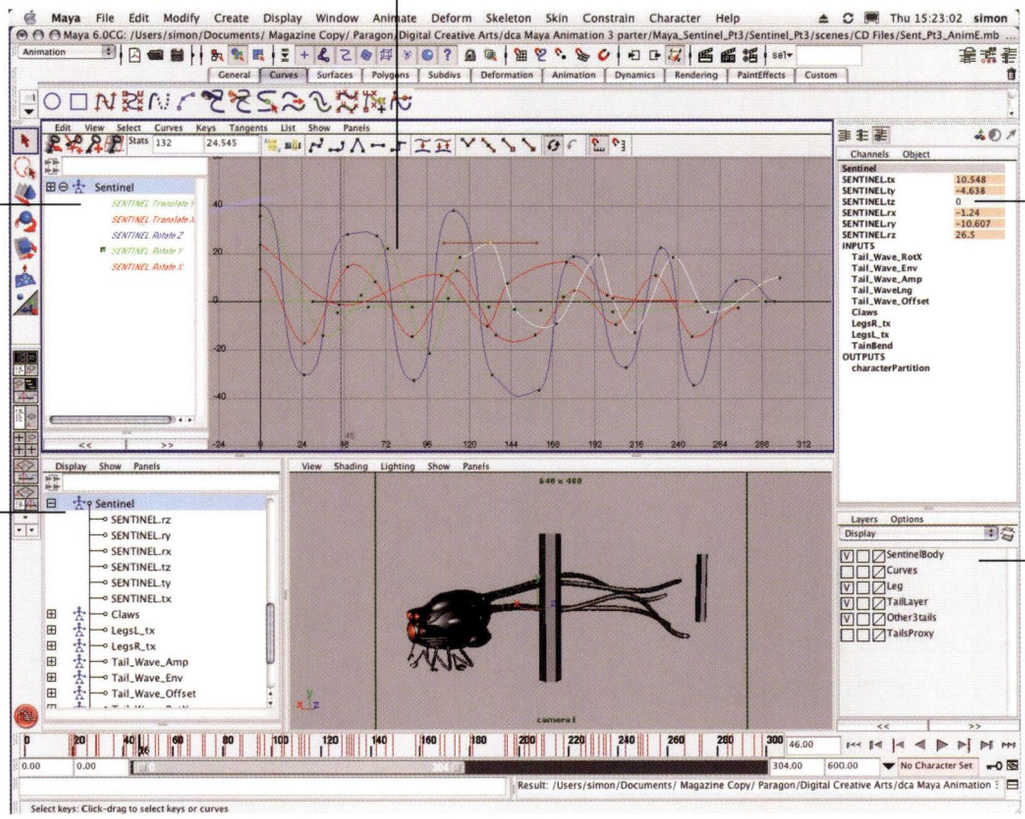
The Graph Editor displays animated attributes as curves with keyframes on them. These can be selected and moved to fine tune the animation

### The Graph Editor list

This displays the animated channels of selected objects or character sets. Click on the items in the list to display their function curve

### Outliner

The Outliner displays scene items in a list. Character sets are displayed here too, making it easy to access them for animating

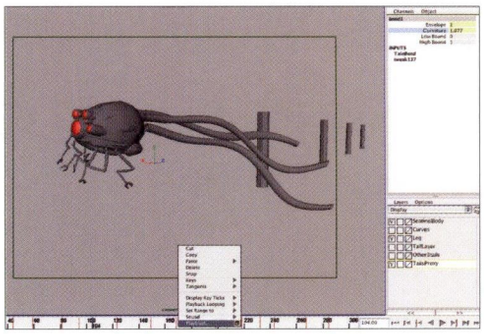



### Channel Box

When a character set is selected its attributes are displayed here. Select the attribute name to use Maya's virtual slider or enter a value directly in the numeric field

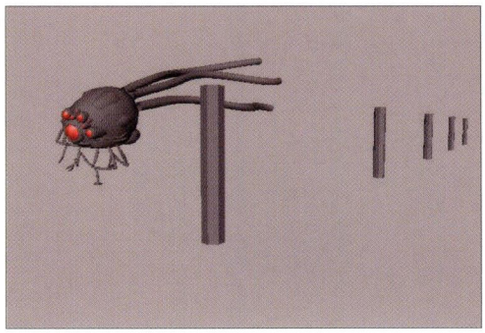
### Layers

Maya's Layers panel is below the Channel box. Here you can manage what objects are displayed by turning layers on or off



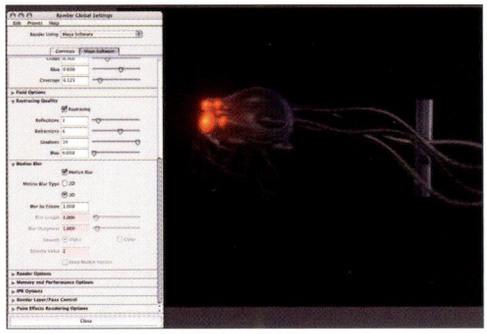
## 26: Making movies

Switch to Camera1 ('Panels', 'Perspective', 'Camera1' from the '3D views' menu), right-click in the Timeline, pick 'Playblast'. Choose '640x480' and uncheck 'Show Ornaments'. If you check 'Save to File' then name the file, then click Playblast. Maya will play the animation and save each frame of the OpenGL window.



## 27: Quick Time

This is a great way to test your animation because you can see the result in real time. Go back and make changes to the keyframes to fine tune your animation if necessary. Once complete you can hide the proxy tails and make the real ones visible. See the file 'Sent_AnimE.mb****'.



## 28: The end!

To render the animation go to 'Windows', 'Render Globals' and change the Frame/Animation Ext to 'Name.#.ext' and image format to QT movie. Click the 'Maya Software' tab, select 'Production Quality' and enable 'Raytracing' and 'Motion Blur'. To render the animation choose 'Render', 'Batch render'.

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| | |
|---|---|
| Poor | ■□□□□ |
| Average | ■■□□□ |
| Good | ■■■□□ |
| Excellent | ■■■■□ |
| Outstanding | ■■■■■ |

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Digital Creative Arts ★★★★★ BEST BUY

Digital Creative Arts ★★★★★ RECOMMENDS

## REVIEWED THIS MONTH


82 ..... Softimage XSI 4

84 ..... Adobe After Effects 6.5

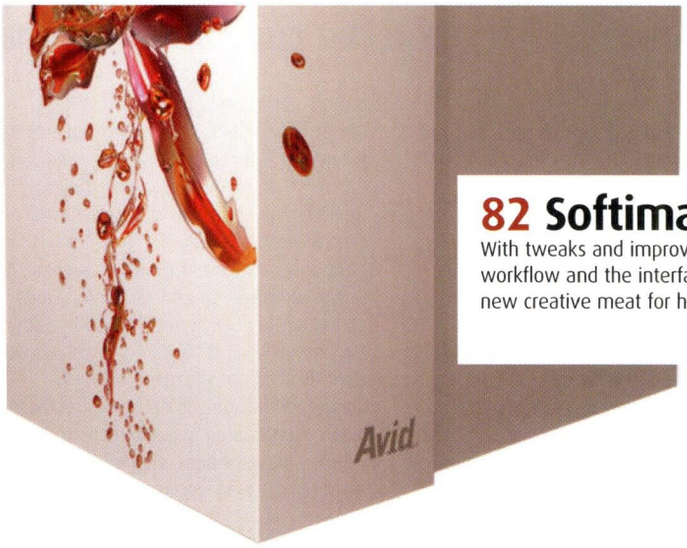
86 ..... Kodak DX7630

88 ..... Sony DCR-HC1000e

90 ..... Adobe Encore DVD 1.5

92 ..... Extensis Portfolio 7

93 ..... Toon Boom Studio 2.5

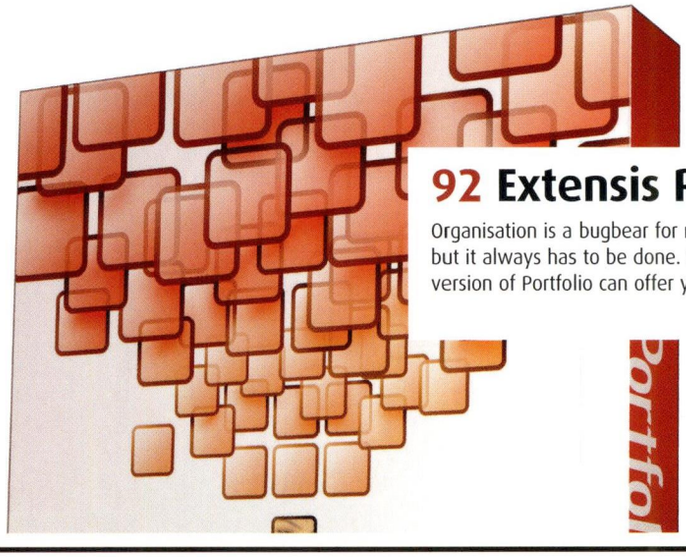




## 82 Softimage|XSI 4.0

With tweaks and improvements a-plenty to workflow and the interface, is there enough new creative meat for hardcore 3D fans?

## 86 Kodak DX7630

Light, powerful and with a great menu system – we explore what the latest camera in the Kodak range will deliver



## 92 Extensis Portfolio 7

Organisation is a bugbear for many creative people, but it always has to be done. See what the latest version of Portfolio can offer you on page 92

# SOFTIMAGE|XSI 4.0

## By enhancing character animation, rendering, dynamics and workflow, Softimage has designed XSI 4.0 to be the cure-all for animators. But it's a panacea at a price

**There are many improvements on the workflow side of version 4.0 set to speed up the studio pipeline, but for reasons of space we'll concentrate mainly on the new features in this Softimage update.**

First up are enhancements to character rigging and animation. The Character Development Kit includes new biped and quadruped guides and rigs, such as the Biped Dog Leg guide. This comes in handy when rigging non-human characters such as dinosaurs or birds, which possess three-bone legs.

Rigid Body Dynamics are another new feature, enabling you to simulate natural physical effects such as gravity acting on the objects in your scene. Any object can be made into a rigid body, either acting as a passive or active member of the simulation. By setting up forces, constraints and collisions, game environments or physical models can be built quickly and easily. There are also different types of rigid body constraints that allow you to restrain the movement of the rigid bodies, such as hinges, ball-and-sockets, springs and sliders.

Another enhancement for version 4.0 is the tail-maker feature, which creates realistic tail movement based on the use of dynamic spring operators. Reference animation is another powerful tool, allowing the use of external data or models to drive the animation. Actions, or saved and encapsulated animation cycles, can be saved externally and shared between scenes and, as a boon to game development studios, multiple animators can all use the same source simultaneously.

Animation Mixer in XSI offers similar powerful non-linear and Timeline-based animation to dedicated packages like Kaydara MotionBuilder. It features enhanced ghosting abilities and pose offsets to aid many animated functions and new clip relations to help control retiming. Meanwhile, the Timeline-based editing enables animators to synchronise several animation editors together into the same master Timeline. Contained within the tree-based compositing toolset are resolution independent vector and raster paint tools. Raster tools work in a similar fashion to image editors like Photoshop, applying paint, masking areas and cloning.

**"You can comb, puff and otherwise groom the hair on your characters, keeping the number of visible rendered hairs down"**

### Specifications

| | |
|---|---|
| **Product:** | Softimage\|XSI 4.0 |
| **URL:** | www.softimage.com |
| **Operating systems:** | **PC (Linux compatible)** |
| **System requirements:** | Windows 2000 or higher<br>Pentium III or faster<br>256Mb RAM<br>520Mb hard disk space |

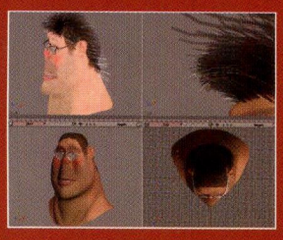
## Look and feel

Vector painting is more concerned with animating keystrokes and shapes, useful in merging layers of animation together with video, for example. On the subject of painting, UV Unwrapping is a key addition to texture editing, again ideal for games developers. This automates the process of painting textures for characters, unwrapping the UV mesh into a series of manageable 'islands'.

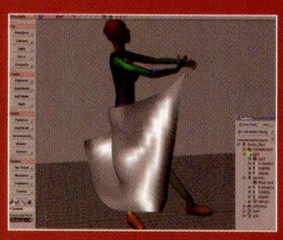
Syflex Cloth, a top-of-the-range cloth simulator (also found in Maya and Houdini) adds highly realistic cloth simulations, while hair is represented in XSI by two different types: guide hairs (segmented curves with IK qualities) used for styling and render hairs, and the 'filler' hairs generated from and interpolated between the guide hairs. You can comb, puff and otherwise groom the hair on your characters, keeping the number of visible rendered hairs down or use only guide hairs when styling to speed up the operation. You can also use dynamics to groom hair, applying the effects of gravity for a new style. Fur – merely short hair with no deformation capabilities – is also supported. Both hair and fur are rendered using Mental Ray, the photorealistic, ray-tracing renderer included in XSI. Now in version 3.3, Mental Ray features enhancements like high-speed motion blurs and more complex shaders.

The XSI interfaces have been improved at both the high and low level. For example, many dialog boxes feature an intelligent slider for adjusting parameters while the Custom Display Host allows

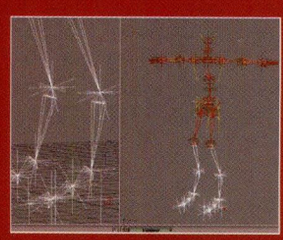
## Making your characters come alive



*Hair in XSI is a fully integrated hair generator that interacts with elements of the environment, such as lighting, other objects and natural forces*



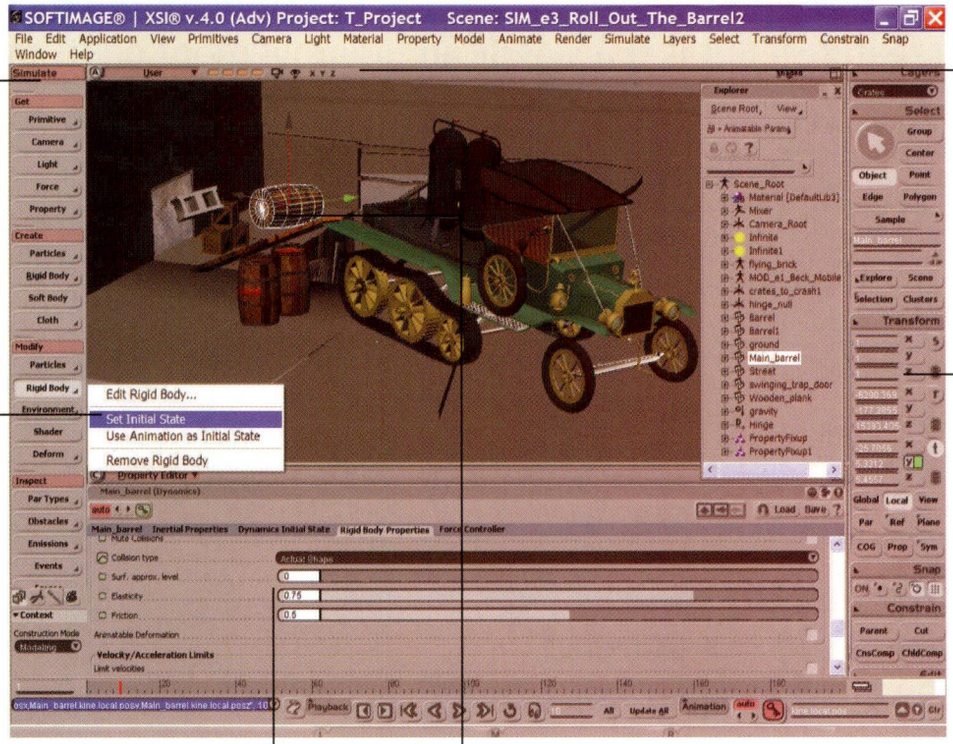
*The cloth simulator uses a set of properties that define cloth and deforms surfaces accordingly. It controls the mass, the friction and the degree of stiffness*



*You can create a regular human biped guide or a Biped Dog Leg guide, which has three-bone legs that are angled like an animal – good for rigging fantastical humanoid creatures*

# High-end tools packed into an improved interface

**XSI 4.0 packs in enough professional tools to sate even the most voracious animation appetite. Here's a quick look at what's what...**


SOFTIMAGE® | XSI® v.4.0 (Adv) Project: T_Project Scene: SIM_e3_Roll_Out_The_Barrel2
File Edit Application View Primitives Camera Light Material Property Model Animate Render Simulate Layers Select Transform Constrain Snap
Window Help
Edit Rigid Body...
Set Initial State
Use Animation as Initial State
Remove Rigid Body

**Menu modes**
The toolbars on the left side of the XSI interface are used for work modes (model, animate, render, simulate, hair mode, weights and palettes). Simulate mode, shown here, sets up particle effects and dynamic body simulations

**Versatile views**
Viewports don't just show orthographic views of the scene. They're also used to display the Animation Mixer, Explorer window, render and compositing trees, saved camera views and more

**Quick adjustment**
The rigid bodies can be repositioned and have their initial states reset after movement, enabling quick experimentation during simulations

**Command centre**
The right side toolbar is the main command area, allowing access to layers and object selection tools, as well as translation, rotation, scaling and editing functions. Most are also accessible by hot keys

**Property editor**
Physical and dynamic properties of all objects in the scene can be changed at any time. The Property Editor viewport allows a wide range of Parameters to be adjusted

**Dynamics**
Active rigid body objects will react to forces, constraints, and collisions in a simulation, while passive rigid body objects do not, but can be used as obstacles or constraining objects

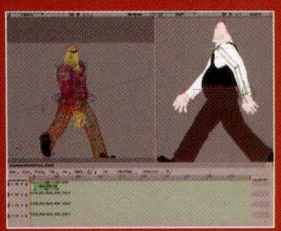
external viewers such as game engines to be hosted within XSI, embedded as a custom view from within the application itself.

## Getting out there

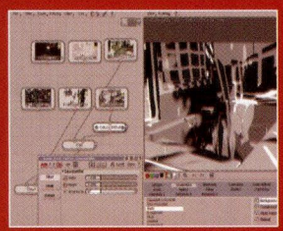
There's also more connectivity. Using the Net View, you can connect to the Web from within an XSI viewport, using it to browse for reference material, as well as to drag and drop models, textures, animation and other scene components directly into XSI.

Facilities can use Net View to display HTML-based production asset management systems while users can use it to view and access storyboards, materials and production assignments and check the status of projects from within XSI.

It's not all plain sailing with XSI though; we had a few odd crashes, particularly when working with hair, and once had to run the repair application from the CD. Licensing can also be a bit of a trial, so make sure you get all the details right first – a point to be aware of here is that like Maya, XSI comes in three versions. Foundation is aimed at the individual artist or small studio and includes as its key features Mental Ray 3.3, full cloth and particles, polygon and advanced sub-division surface modelling, real-time shaders, scripting support, node floating and non-linear animation, audio and actions (NLA3). Next level up is Essentials, which adds Rigid (and Soft) Body dynamics, the new character rig systems, an SDK and the Custom Display Host. Lastly is Advanced, the version we have reviewed here, which has the above and also hair and fur, the compositing and paint tools and extensive satellite rendering. Of course, the difference in feature sets is reflected in the price – so pick wisely! ■



■ *The animation mixer is a non-linear tool that allows you to create animation or shape sequences and mixes, taking underlying animation data and packaging it into clips*



■ *Compositing render passes gives you the ability to change how areas, effects or properties are rendered, and the extent to which they contribute to the look of the scene*

## Verdict Digital CreativeArts

**Product:** SOFTIMAGE|XSI 4.0
**Sales hotline:** 0207 534 2800 [UK only]
**Price:** Foundation £351.32; Essentials £1498; Advanced v4.0 £5270 [inc VAT]

| | |
|---|---|
| **Ease of use:** | ■■■■□ |
| **Features:** | ■■■■■ |
| **Quality of results:** | ■■■■■ |
| **Value for money:** | ■■■□□ |

■ **What's good:** Character rigging, animation enhancements, paint, texturing and compositing tools, dynamics, hair and cloth

■ **What's bad:** Expensive to get all the attractive options, minor interface and operational bugs

**OVERALL PERCENTAGE: 85%**

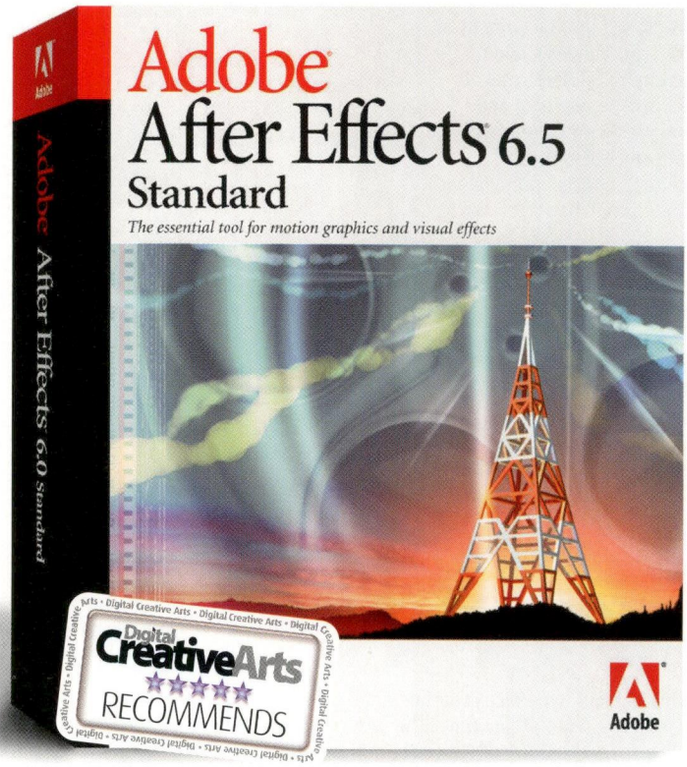
# AFTER EFFECTS 6.5

## Of the new Adobe programs, After Effects 6.5 has some of the most intriguing additions and features. But is it a significant improvement on its predecessor?

**After Effects is one of the more difficult Adobe programs to describe. Premiere edits, Audition handles sound and Encore deals with DVD creation. Each has a clearly defined set of parameters for users to immediately recognise.** After Effects has many impressive attributes, spanning a large number of subjects, which is why it is so difficult to pigeonhole. To make matters worse, Adobe has made a significant update, making it even more versatile. A special effects program no longer really covers it.

First in the list of new features is the onion skinning, which is part of the cloning tool. Those familiar with image manipulation software will recognise this term for being able to see the image that is to be copied over the background image. It is slightly opaque, so matching up while cloning is no longer a hit-and-miss process. What it adds to the program is much more versatility with the clone tool that, if used correctly, becomes the most powerful feature of the program. As cloning is one of the more useful aspects of After Effects to the casual user, it is predictable that it would be improved in some way, but some of the less well-known features have also received some attention, one such being the Expression tool.

An Expression copies keyframes onto another object so that they can be synchronised. In After Effects 6.5, the ability to alter the effect of the copied key frames has been added. The Expression Selector allows various values to be changed, so that the influence can be diminished or increased. It's a time-saver to be able to clone keyframes easily, especially when animations are complicated. Another series of variables within the Expression Selector means that nothing is lost when an object isn't individually keyframed. A less visually recognisable effect to gain something is the motion tracker. More options are included to restrict the tracking, allowing horizontal and vertical to be isolated. This can make animation appear smoother, as small movements don't cause a problem.




**"A significant update, making it even more versatile – a special effects program no longer covers it"**

### Specifications

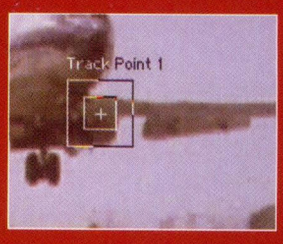
| | |
|---|---|
| **Product:** | Adobe After Effects 6.5 |
| **URL:** | www.adobe.co.uk |
| **Operating systems:** | **PC and Mac** |
| **System requirements:** | **PC**<br>Windows XP or higher,<br>Pentium III, 128Mb RAM,<br>150Mb hard disk space |
| **System requirements:** | **Mac**<br>OS X 10.3,<br>PowerPC processor<br>128Mb RAM<br>150Mb hard disk space |

## Skin the onion

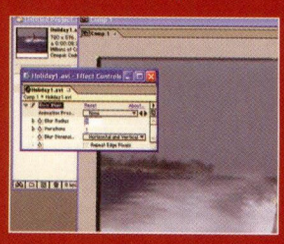
Users of After Effects will be impressed by the new options included, which allow a larger degree of control. None have made it more user-friendly, with the possible exception of the onion skinning, but all have beefed up some areas that were lacking slightly. Text has gained indirectly from most of the updates as it can be aided by the new animation attributes. There have also been a number of more substantial improvements, with the addition of 300 preset animations. Opening up the new Effects and Presets window reveals the extent of the additions, along with how they are grouped. Rather than just categorising by visual recognition, the animations are put together dependent on their best usage. This means that titles can be created quickly using the click-and-drag system, and acts as a good introduction to the abilities of the program.

As well as the cosmetic changes, some general interface alterations have been made that make the process of creating effects much quicker. Being able to zoom in using the scroll wheel is surprisingly useful, and the layout of the new windows is more reminiscent of Premiere Pro. A few of the updates do slip by unnoticed, such as 16-bit effects support, which makes particle effects look much more impressive.

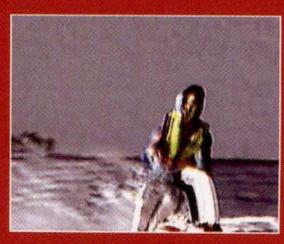
## Subtle changes that give video a professional polish



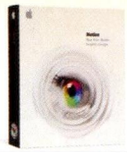

*A new motion-tracking feature can restrict the axis on which it operates, so that only horizontal or vertical can be followed*



*A more intelligent blur tool takes into account the surrounding pixels' colour, making any added blur effect much smoother in transition*



*The quality of the standard and new effects has been increased by enabling the 16-bit-per-channel colour quality standard*



# Manipulating movies with version 6.5

**The new features show themselves more in operation than in the interface, but there have been a few tweaks here and there...**

**Responsiveness**
Even though it isn't necessarily mentioned in the list of updates, the program does seem to respond much quicker to selections, especially in the preview window

**Cluttered interface**
An aspect which has troubled the program in the past is the very cluttered interface, as the windows can increase exponentially when a big project is being created

**Onion skinning**
Using the clone tool has become much easier as the original media can appear in an opaque form over the top of the footage to be copied onto, meaning that lining up footage is much easier

**Effects and Presets**
One of the new windows to appear is really just an addition to an old one, in the form of a plethora of new preset animations for text

**No huge changes**
The interface is left much the same as in After Effects 6.0, although tools gets an update and there are a number of expanded options

**Additions to the window**
The options in the clone tool window have increased with the addition of the onion skinning tool, Clone Source Overlay, as well as its opacity level and alignment settings

Adobe After Effects 6.5 isn't for everyone. Users will have to dig to truly find the meat of the update, especially if they are unfamiliar with the program. All of the major features have been improved to an impressive extent and the increased options come in handy more than once on a standard project. But owners of After Effects 6 will have to take a good look at the list of improvements and see if they can justify the cost of the upgrade. The interface is no friendlier and a few of the little idiosyncrasies remain. But for the most part it does feel more responsive and as if the bugs, few as they were, have been removed.

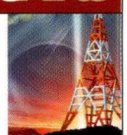
Improvements to the cloning tool are the most impressive of the new features and it works excellently. Preset animations are very useful and cover a wide range of situations, and the Expression selector does make life slightly easier on big projects. Shelling out £81 for the update may seem like a stretch, so it's not advisable for anyone who doesn't clone or animate frequently. But if you aren't doing that, there isn't much point in having the program at all. Recommended for new owners, but the update needs careful consideration before splashing out. ■

**"A few of the idiosyncrasies remain, but it does feel more responsive and as if the bugs, few as they were, have been removed"**

■ *Expanding on the idea of Expressions, the repeated keyframes that are created can now be reduced in influence*

■ *Rather than animating titles, manual presets allow the whole process to be performed using the simple click-and-drag method*

## Verdict Digital CreativeArts



**Product:** Adobe After Effects 6.5
**Sales hotline:** 0208 606 1100 [UK]
**Price:** £663.88 [inc VAT]
**Upgrade price:** £81.08

| | |
|---|---|
| **Ease of use:** | ■■■■□ |
| **Features:** | ■■■■■ |
| **Quality of results:** | ■■■■■ |
| **Value for money:** | ■■■□□ |

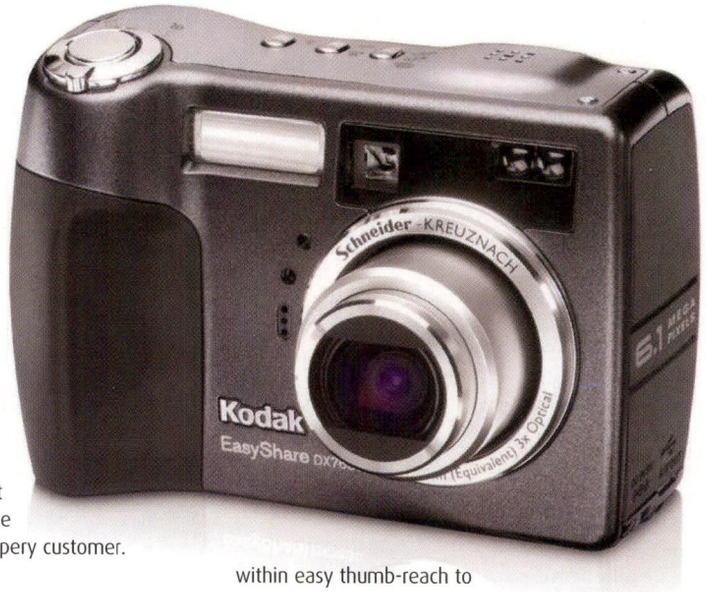
■ **What's good:** The new tools, in particular the cloning improvements

■ **What's bad:** The price – at this amount you'll have to decide if the upgrade is worth it

**OVERALL PERCENTAGE: 88%**

# KODAK EASYSHARE DX7630

## The new king of the EasyShares combines advanced features with amateur-friendly controls. But does it succeed?




**Aesthetically, the 7630 is quite an oddity. Its colour scheme bears little resemblance to any other model in its class, which will no doubt please those who take pride in individualism. Comprised of various shades of grey, the camera has a respectable, mottled look that belies the somewhat disappointing, plasticy feel.**

There's no doubt that the 7630 is one of the lightest 6MP digicams on the market. Weighing in at 219g when not loaded with the included Li-ion rechargeable battery, it's a great camera to take out and about. Inevitably though, the trade-off is that the plastic body feels a bit flimsy and suggests that it may not take too kindly to more heavy knocks and bumps.

However, the upside is that the 7630 is comfortable to hold. The right-side handgrip is of a decent size and fits snugly in the palm, but while there is evidence of a move towards ergonomic shaping with a chiselled-out finger notch, it still doesn't feel secure. In an attempt to help remedy this, Kodak has opted to cover the grip with rubber to help make it feel more dependable, but the truth is that the smooth compound coating actually manages to make things worse. It would have benefited from having a more grainy texture to give some measure of resistance, but as it is, users are warned that the 7630 can be something of a slippery customer.

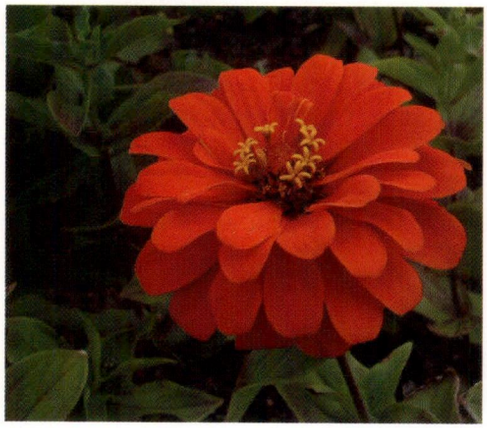
### Dials and buttons

Positioned above the handgrip is the shutter release that is surrounded by a responsive zoom control lever. In the centre of the top panel is a group of three buttons that give access to macro mode, flash settings and exposure bracketing. The latter is a welcome feature on such a mid-range camera, and allows users to shoot a series of consecutive pictures while carrying exposure settings in order to give a stronger chance of capturing a perfectly lit shot. Moving around to the back of the camera, controls have been positioned within easy thumb-reach to ensure that adjustments can be made quickly while composing a shot. Located in the top-right corner is a small jog dial, which is used to alter settings for exposure compensation, flash throttle and ISO speeds. This is easy to spin left and right with the thumb, but the dial must be pressed inwards to select and activate configuration changes, which can be fiddly.

Next to the jog dial are buttons for Menu, Delete and Review, while below this is a large rotating mode dial that can be used to set the camera into a number of shooting modes. Around the dial are a total of nine

### Specifications

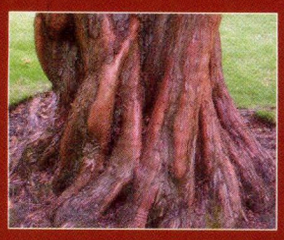
| | |
|---|---|
| **Product:** | Kodak EasyShare DX7630 |
| **URL:** | wwwuk.kodak.com |
| **Megapixels:** | 6.1 |
| **Max resolution:** | 2,856 x 2,142 |
| **Lens data:** | f/2.8 – 4.8 (39 – 117mm) |
| **Zoom:** | 3x optical, 4x digital |
| **ISO range:** | Auto, 100, 200, 400, 800 |
| **LCD monitor:** | 2.2 inches |
| **Storage media:** | 32Mb internal, MMC/SD Card |
| **Power:** | Li-Ion rechargeable |
| **Weight:** | 219g (without battery or card) |
| **Dimensions:** | 100 x 69 x 52mm |



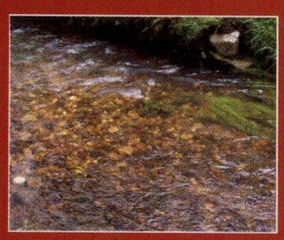
*The 7630's macro mode is capable of some excellent close ups, aided in no small measure by astonishing 6MP detail*

*The 3x optical zoom is by no means the strongest in its class, but it's plenty powerful enough to compose everyday shots*

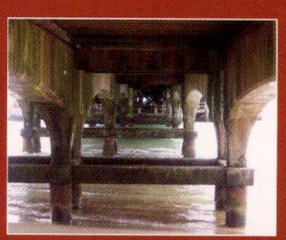
## A closer look at the flagship EasyShare



*Although a fully automatic shooting mode will appeal to amateur users, it's by no means perfect for everyone. Exposure can sometimes be quite ineffective too*

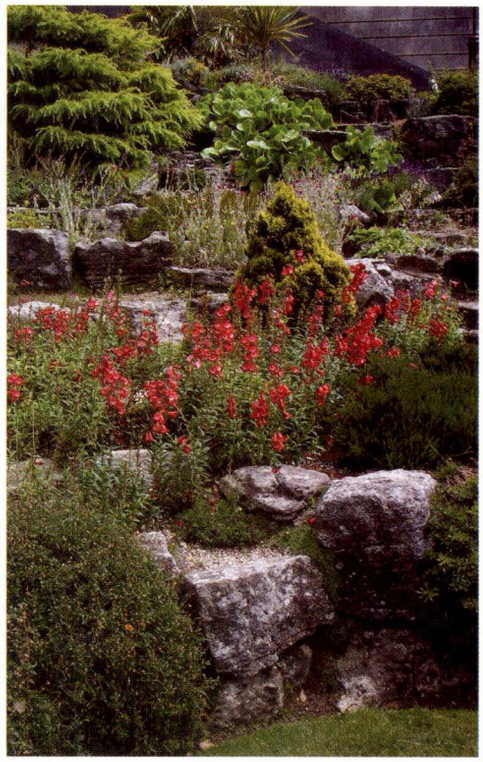


*The 7630 has no problems at all when capturing all the details from moving subjects, as this nice and crisp photo of a babbling brook demonstrates for you*



*In tricky shooting conditions with high-contrast areas, the 7630 can be easily confused. Notice the strong burnout and some chromatic abberation here*

Colour tones are well defined, but do tend to be a little subdued in fully automatic mode



A high-quality Schneider-Kreuznach VARIOGON lens delivers clear and life-like images

**"As with all the cameras in the EasyShare range, major plus points are scored by the incredibly easy to use on-screen menu"**

modes, including a fully automatic setting that enables you the convenience of a true point-and-shoot digicam. A Scene mode enables users to pick from a range of 16 pre-configured settings that have been tailored to a multitude of common shooting conditions, including Night Scene, Portrait and Sports.

Advanced shooters will not go wanting, thanks to modes such as Program, Aperture Priority, Shutter Priority and Custom, which enable users to take full control of values such as ISO and aperture size.

## Massive monitor

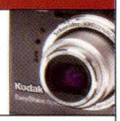
Aside from the controls, the back of the camera is dominated by the huge 2.2-inch LCD monitor, which is capable of delivering crisp, clear image previews. But the screen isn't that well lit and it can become difficult to make out shot details in anything approaching bright conditions. It's a shame that the optical viewfinder does not present a viable alternative when composing, as in practice the accuracy is too low to enable users to shoot a precisely cropped image.

However, as is true of all of the cameras in Kodak's EasyShare range, major plus points are scored by the simplified and incredibly easy to use on-screen menu system. A small multi-directional stick sits in the middle of the mode dial, which is used to navigate through the beginner-friendly options. Icons are large and easy to see, and it's clear that Kodak has kept the needs of amateur users firmly in mind by providing helpful setup information when selecting shooting modes, meaning that users will always be clear on which is the best to use for capturing a particular shot.

Finally, and perhaps most importantly, the 7630 is capable of shooting some very pleasing images. The 6.1MP sensor and commendable Schneider-Kreuznach VARIOGON 3x optical zoom lens deliver crisp detail, good saturation and realistic, if subdued, colour tones. However, there is noticeable purple fringing on high-contrast shots, and the camera does take a good few seconds to write a maximum quality file to either the internal memory or an optional SD Card, so impatient users may find the delay an annoyance.

A large 2.2-inch LCD monitor dominates the rear of the camera, although it can be tough to see in bright conditions

## Verdict Digital CreativeArts



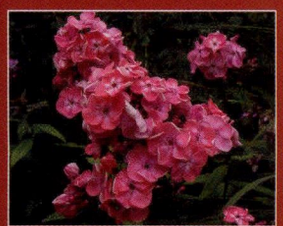
**Product:** Kodak EasyShare DX7630
**Sales hotline:** 0870 243 0270 [UK only]
**Price:** £299 [inc VAT]

| | |
|---|---|
| Ease of use: | ■■■■■ |
| Features: | ■■■□□ |
| Quality of results: | ■■■□□ |
| Value for money: | ■■■■□ |

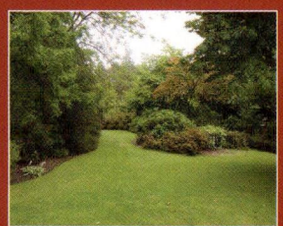
**What's good:** Extremely easy to use and a good price for a 6MP camera

**What's bad:** Flimsy build and noticeable purple fringing mars some otherwise excellent shots

**OVERALL PERCENTAGE: 80%**



The 7630 comes with a huge range of preset shooting modes, all of which will help beginners to capture the pleasing shots they desire with virtually no effort



Wide angle performance was never going to be one of this camera's strong points, but its limited range should be adequate for most people's day-to-day shooting

# SONY DCR-HC1000E

## Sony's replacement for the popular DCR-TRV950 puts a new spin on things. But will its rotating body win us over or put us off?

**Words cannot describe the look on our faces when Sony's brand new DCR-HC1000e entered the office.** This is a long-awaited camcorder; the successor to the ever-popular DCR-TRV950, Sony's entry-level prosumer model for users looking for professional image quality without spending thousands for professional features.

We'd seen the shots and knew that it sported a radical new look. The most obvious of all was a dual rotating body; one half housing the camera lens, the other containing the tape transport. But even though we knew what was coming, this is a shockingly different camcorder. Rotating body designs have been around for a while now, with Sharp producing a cheap consumer model that didn't really work and JVC attaching a rotating trap transport to its massive GR-PD1. Hopes were high that Sony's design team – which is capable of spectacular innovation – could pull a rabbit out of the hat and make rotating body shells work. But it seems Sony has met its match and no amount of design skill can save this idea.

Weighing in at 780g the DCR-HC1000e is actually 190g lighter than the DCR-TRV950, but it feels heavier. This can quickly be put down to the camcorder being horribly unbalanced. It's wider than other models and picking it up with one hand is a complete non-starter, the camcorder simply droops down and your left hand automatically reaches up to catch it – from that point on you realise this is going to be a two-handed affair.

### Specifications

| | |
|---|---|
| **Product:** | Sony DCR-HC1000e |
| **URL:** | www.sony.co.uk |
| **Effective megapixels:** | 1.07 |
| **Recording format:** | MiniDV |
| **Optical zoom:** | 12x |
| **Digital zoom:** | 150 |
| **Focal length:** | N/A |
| **Filter diameter:** | 37mm |
| **Shutter speed:** | N/A |
| **Connections:** | DV, USB, Lanc, Mic |
| **Memory card:** | Memory Stick Duo |
| **Audio recording:** | 4 channel surround |
| **Dimensions:** | 4101 x 78 x 158mm |
| **Weight:** | 780g |

With the body rotated it is actually held more like an SLR camera than a camcorder and it has the same tendency to lean forward. This is not a problem when you're taking a snapshot image with a camera, but when you're trying to film something for five minutes it is a real concern.

You could argue that a prosumer camcorder like this will spend most of its life atop a tripod. With this in mind we are pleased to report that it is a top-loader, so changing tapes while using a tripod won't be a problem. What is a concern is that the viewfinder isn't adjustable so you'll have to stoop over to use it. This is an unpleasant trend among low-end consumer models, but we never dreamed Sony would fail to include it on a prosumer camcorder. Maybe Sony now has so much faith in its hybrid monitor that it's on its way to dispensing with the viewfinder altogether. This is something of a mistake, because the viewfinder is essential on long shoots to preserve battery power and is still a better choice in bright light conditions. We didn't fail to notice that the DCR-HC1000 only has a 2.5-inch monitor rather than the 3-inch one found on the old DCR-TRV950, and it also features the touch-screen menu system Sony is famous for, enabling the body to contain virtually no buttons. While this isn't a problem, we do feel that a prosumer model should have more buttons, such as white balance, exposure and gain placed on the body for easy reach.

**"How do you rate something that produces spectacular results, is a bit of a bargain, but is simply horrible to hold?"**

It does feature a manual focus ring which doubles up as a manual zoom ring at the touch of switch. Thankfully, this switch is on the outside of the body,

## A closer look at the camera's form

*The camcorder is split in two rotating parts and is much wider than most other models, requiring it to be held with both hands like a digital stills camera*

*The manual focus ring is invaluable for semi-professionals and the DCR-HC1000e has a switch to change it to a manual zoom ring*

*One of the truly disappointing features is the lack of an adjustable viewfinder. This makes it hard to use when the camcorder is placed upon a tripod*

# Hard to handle, but still oozes Sony style

**Although the quality is astonishing for the price, we have a few misgivings about the design of Sony's weighty DV contender. Here's a quick tour...**

**Rotating body shell**
By far the most prominent feature of the DCR-HC1000e is the rotating body shell that forces you to hold the camcorder with two hands

**Pop-up light**
There is a pop-up light to help the camcorder when it is taking still photographs

**Touch-screen monitor**
The monitor is 0.5 inches smaller than the model it is set to replace but does feature Sony's famous touch-screen menu system

**Monitor record button**
A unique touch found only on the latest Sony models is this separate record button located on the Monitor

**Focus ring**
The manual focus ring is vital for professional shoots and, at the flick of a switch, doubles up as a manual zoom ring

**Essential info**
Another nice touch is the presence of a button that immediately displays how much battery time is left on the camcorder

and although the focus is fine – we were dismayed by the lack of responsiveness when using the ring to zoom – it's almost as if it's half a second out of sync.

It's not really looking good for the DCR-HC1000e, is it? Fortunately for Sony it has a few good cards left to play. The first is its image quality, which is truly astounding. Inside the big weighty shell that your left hand is forced to hold sits three separate 1/4.7-inch CCDs with a 1.07-megapixel gross. This is combined with a Carl Zeiss Vario T lens and an optical image stabiliser makes a welcome appearance. The result is by far the best image quality available for its price, which we notice has now dropped by £500 from the DCR-TRV950 to a very affordable £999.99.

The new price point places this camcorder well under the £1,600 charged by its nearest competitor, the Canon XM2, and £200 less than Panasonic's up and coming NV-GS400. And it offers serious image quality to back itself up. Not only that, but another neat trick is the inclusion of four-channel recording, which enables the camcorder to record surround sound using the four built-in mics – not a bad feature at all.

Which puts us in a bit of a quandary. How do you rate something that produces spectacular results, is a bit of a bargain, but is simply horrible to hold? It's difficult to judge something new, and the tendency is to err on the side of caution when dealing with an unknown quantity, which the DCR-HC1000e certainly is. It may be that time proves us wrong and the DCR-HC1000e becomes a classic, but somehow we don't think so: the body shape is too radical, the camcorder is too heavy and the lack of adjustable viewfinder seems like an unforgivable crime in a prosumer camcorder. The DCR-HC1000e is aiming to replace an exceptionally popular camcorder, and we just don't think it's up to the job. Our advice is to head out and buy a DCR-TRV950 quickly because they won't last long. If you are still interested in the DCR-HC1000e, and at this price with this image quality you might well be, hold one for a while before making up your mind. ■

## Verdict Digital Creative Arts

**Product:** DCR-HC1000e
**Sales hotline:** 08705 111 999 [UK only]
**Price:** £999.99 [inc VAT]

| | |
|---|---|
| **Ease of use:** | ■■□□□ |
| **Features:** | ■■■■□ |
| **Quality of results:** | ■■■■■ |
| **Value for money:** | ■■■■■ |

■ **What's good:** Looking at the astounding image quality and the competitive price

■ **What's bad:** Holding it in your hands and the lack of an adjustable viewfinder

**OVERALL PERCENTAGE: 83%**

■ *The monitor is smaller than the DCR-TRV950 model it replaces, but it does feature Sony's touch-screen menu system, which has equal amounts of admirers and detractors*

■ *The one things the DCR-HC1000e does possess is fab image quality. This is mainly due to it recording with three separate CCDs with a 1.07-megapixel image*

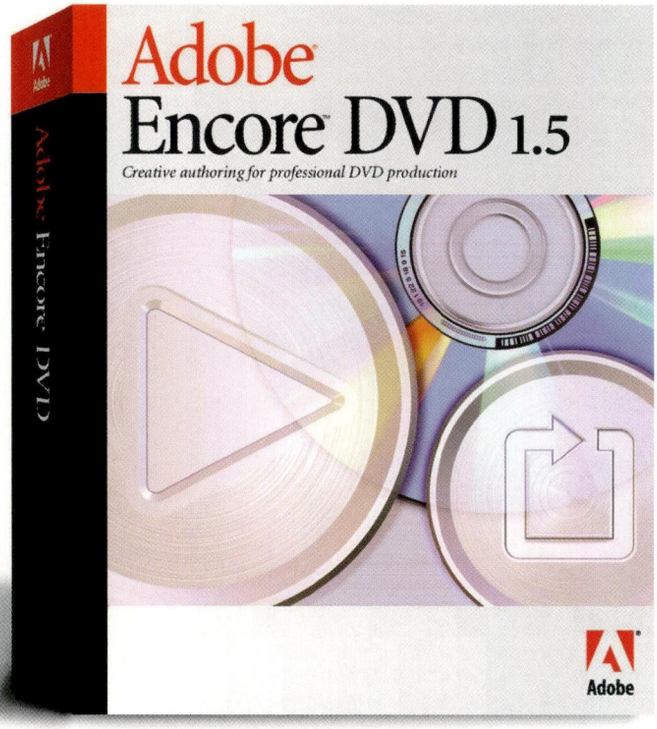
# ENCORE DVD 1.5

## Does this update fix the problems of the original? We flip the bonnet of Adobe's DVD authoring program and check out the engine

**Encore DVD was released to something of a fanfare earlier this year, with many video editors feeling that it was long past time that Adobe brought its expertise to the DVD authoring market.**

Adobe is famous because its products have cleverly designed interfaces that place media manipulation tools in a logical and easy-to-use environment. In short: Adobe programs are generally quite nice to use. Oddly, though, Encore DVD always had a very clunky feel to it – windows obscured each other and, unless you had a truly massive monitor, you'd spend a lot of time rearranging the desktop. It's all in stark contrast to Photoshop CS, which crams a huge amount into small boxes around the side of the screen.

The original Encore clearly had a few teething problems, but it also showed a lot of promise and, with a few kinks ironed out, could easily be the Photoshop of the DVD-authoring market. So this update has been eagerly awaited for some time.




**"The original Encore had teething problems... but little has been done to redesign the program's interface"**

Sadly, little has been done to redesign the program's interface and we notice that Adobe is now recommending a dual monitor as a system specification for using Encore. So unless you own two monitors you'll still be spending a lot of time flipping between different windows.

There has been work done behind the scenes though. One of Adobe Encore 1.5's much-trumpeted new features is the ability to import AVI files from Premiere and convert the Timeline markers into Chapter Points. We should point out though that this is such a blindingly obvious feature that we assumed it was in the original Encore and spent a long time trying to figure out what we were doing wrong when it didn't work!

Which is the way it is with many of the updates in Encore 1.5. Take round-trip capabilities with Photoshop, for example. This feature means that you can use Encore and Photoshop at the same time. Encore's menus are essentially Photoshop files with different elements sitting on different layers. 'Round-trip' means that you can have the menu open in Encore and Photoshop and any changes you make in Photoshop are instantly brought into Encore the minute you press Save. A great feature, and very powerful for users familiar with Photoshop – but still, you'd have thought this feature would have been available in the original version.

And so it goes for all the other new features: support for QuickTime files, Project Checking and the ability to disable the user's remote control are all welcome additions – but they aren't really that spectacular and, as features, they are more noted for their absence in the original version than their presence in this update.

Even the new Styles and enhanced Library aren't that impressive. Encore DVD still lacks a lot of templates to work with and those that are included aren't up to Adobe's usual high-standards. This is the company that makes Photoshop so you'd think it could out-supply and out-perform every other company in the world when it came to knocking together a few design backgrounds, but the themes aren't as good as cheaper options like DVD Workshop 2, let alone Apple's incredibly stylish DVD Studio Pro 3. As with the original version you'll have to be competent at putting together your own artwork if you want your DVD menus to look impressive.

### Specifications

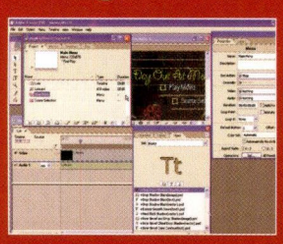
| | |
|---|---|
| **Product:** | Adobe Encore |
| **URL:** | www.adobe.co.uk |
| **Operating systems:** | **PC** |
| **System requirements:** | Windows XP |
| | Pentium III 800MHz |
| | 256MB RAM |
| | 1Gb hard disk space |

### Missing motion

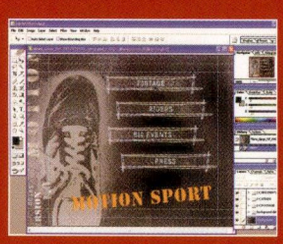
Another major feature noted for its absence was the ability to create motion elements on the menu. Instead you need to use Adobe After Effects to create the keyframe animations that move buttons around. Which seems to us like a rather extravagant product to have to buy to create a basic feature found on many cheaper DVD authoring programs.

Unlike After Effects, Premiere and Photoshop, which have been refined over subsequent generations, this

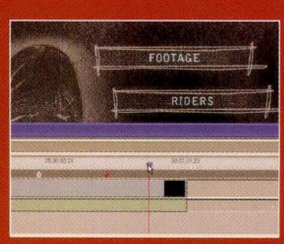
## The good and the bad...



*This is the default workspace layout for menu design using just one monitor. As you can see it has windows that obscure each other and the Menu window is too small*



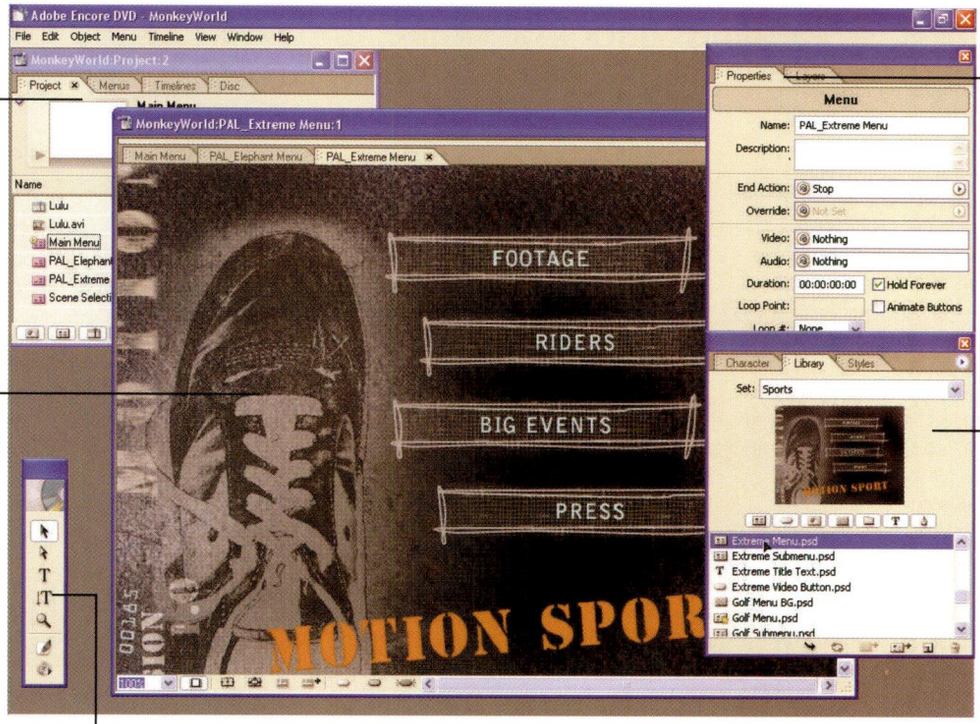

*Any menu can be edited in Photoshop from within Encore DVD and each element is placed on a different layer. As soon as you press Save the menu is updated in Encore*




*One new feature that really should have been in the original program is the ability to recognise Markers in Premiere files and convert them into Chapter Points*

# Explore what Encore offers the authoring enthusiast

**Here's Encore's oh-so-crowded interface in all its muddled glory. Despite needing two monitors to use it properly, the program's integration will delight Adobephiles**




**Project window**
The Project window houses all the menus, video clips, timelines and other media used within the project

**Menu window**
This window enables you to work directly on the DVD menu. Buttons, text and artwork are all treated separately and can be adjusted and moved independently. The menu can also be imported as a layered Photoshop file for closer work

**Properties**
You can check and adjust the properties of any item used in the project using this window. This window enables you to set the duration of animated elements, for example

**Library**
Encore DVD 1.5 has an improved library of menus and artwork that are now grouped in different Sets. They are still not up to the standard found in other programs, though

**Tools**
Encore has a much more limited Tool set than other Adobe programs. The only tools used are Selection and Type which are used to move items around the screen and enter and change text respectively

## "There's no doubting its power, though – underneath the bonnet you'll find an incredibly strong DVD authoring engine"

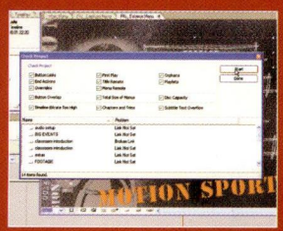
program remains very much in its infancy. There's no doubting its power though – underneath the bonnet you'll find an incredibly strong DVD authoring engine. It offers total control over transcoding options and an advanced user will spend hours tweaking the settings to get maximum effect.

The close integration with Adobe Photoshop, Premiere and After Effects also makes it the perfect program for users of Adobe's other programs.

At just over £450, it's not a cheap program to buy, and we can see why many users are opting for DVD Workshop 2, which offers similar functionality – but for £200 less. The £81.08 upgrade fee is particularly galling as the new features feel like the bits Adobe forgot to include in the first place.

However, all is not lost because we would also remind our readers that Matrox does a fantastic deal with its RTX.10 capture card, which offers true real-time capability and is bundled with fully boxed copies of Encore DVD 1.5, Premiere 1.5 and Audition 1.5 for just £527 – which somehow manages to be less than half the price Adobe will sell them to you for. ■

■ *Another new feature is the ability to import QuickTime files directly. In the previous version you would have to use Premiere to convert the QuickTime file into a regular AVI*



■ *The project-checking facility has been improved and it now has the ability to check your project as you work on it. This ensures that the DVD menu is working correctly*

### Verdict — Digital Creative Arts

**Product:** Adobe Encore
**Sales hotline:** 0870 606 0325 [UK only]
**Price:** £452 [inc VAT]
**Upgrade price:** £81.08

| | |
|---|---|
| **Ease of use:** | ■■■□□ |
| **Features:** | ■■■■□ |
| **Quality of results:** | ■■■■■ |
| **Value for money:** | ■■■□□ |

■ **What's good:** Offers close integration with Photoshop and other Adobe programs
■ **What's bad:** Clumsy interface has too many floating windows

**OVERALL PERCENTAGE: 82%**

# EXTENSIS PORTFOLIO 7

## Is your hard drive a chaotic mess of badly-organised digital media files? If so, it's time to whip things back into shape, and fast!

**If you're a prolific digital photographer, a fertile graphic artist or a workaholic digital video editor, chances are that your hard disk is littered with files and folders all jumbled up in a huge mess.** It's easily done, but the problem is that when you're in the middle of an important project and you need to find a specific file fast, it can sometimes take an absolute age – and a lot of hair tugging – to track it down.

Luckily, Extensis Portfolio 7 is here to help sort things out. Able to cope with a simply huge range of different media files (including digital video), the program has been designed to effortlessly whip even the most chaotic file system into shape in no time at all. Portfolio works by analysing the media files on a hard disk and creating an all-in-one catalogue that enables the user to browse, search and view all the items from within a single interface. There are two main ways of doing this. The first option is to have Portfolio collate information and thumbnail previews of media files in their present location, and simply draw up a database without physically moving anything around on the disk. Alternatively, if you're really fed up with the current messy storage system and want Portfolio to reorganise the media files on the hard drive into a more coherent order, the program will dutifully oblige.

When a catalogue has been completed, it's time to make use of Portfolio's trump card: file synchronisation. You can set up 'Watch Folders' in just a few clicks of the mouse, which basically means that Portfolio will keep an eye on the activity within specified folders and update any changes to the catalogue as necessary.

### Files at your fingertips

For example, say you'd created a catalogue that contains all the photographs stored in a folder called 'Digital Pictures'. After the catalogue had been made, if you were to then delete some files from the 'Digital Pictures' folder and perhaps add in a few new images, Portfolio would monitor the changes and amend the catalogue as necessary. This can either be done automatically or manually, and is initiated with a quick click on the Synchronize Folder button.

**"In addition to the extensive cataloguing tools it packs, Portfolio also keeps a number of other tricks up its sleeve"**

It's an incredibly useful and time-saving feature, and there really is no better way of ensuring that an image collection is kept bang up-to-date.

Portfolio displays image thumbnails of the media files in one big list within the main view pane, even if the original files are actually located in different folders. However, this does not mean that you need to go and find these original files if you wish to use them in other applications, because Portfolio offers a fully featured drag-and-drop interface. This means that, instead of having to trawl through a cluttered file tree when looking for a certain file to load into Photoshop, one need only locate the file in Portfolio and drag the thumbnail over to the Photoshop window, where the original file will then load.

In addition to the extensive cataloguing tools it packs, Portfolio also keeps a number of other tricks up its sleeve. First, there's an imbedded Wizard-style utility that can be used to create professional Web galleries of images for publishing online. Second, a built-in archive burning tool means that copying important files to CD is but a mouse click away, which makes light work of the annual archiving chore.

In all, Extensis Portfolio 7 is pretty much the most fully-featured and flexible asset management solution available. We're willing to bet that once you've been using it for a few weeks, you'll begin to wonder how you ever managed without it. ■

### Specifications

| | |
|---|---|
| **Product:** | Extensis Portfolio 7 |
| **URL** | www.extensis.com |
| **Operating system:** | **PC /Mac** |
| **System requirements:** | **PC** |
| | Windows 2000 or above |
| | Pentium 400MHz or faster |
| | 256Mb RAM |
| | 75Mb hard disk space |
| **System requirements:** | **Mac** |
| | G3 or higher |
| | OS X 10.2 or higher |
| | 256Mb RAM |
| | 175Mb hard disk space |

### Verdict Digital Creative Arts

**Product:** Extensis Portfolio 7
**Sales hotline:** N/A [online only]
**Price:** £109 [inc VAT]
**Upgrade Price:** £54

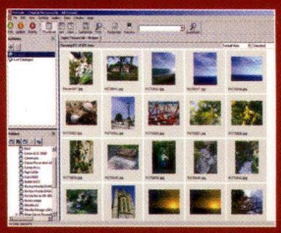
| | |
|---|---|
| **Ease of use:** | ■■■■□ |
| **Features:** | ■■■■■ |
| **Quality of results:** | ■■■■■ |
| **Value for money:** | ■■■□□ |

■ **What's good:** Easy to pick up, fast and extremely flexible too

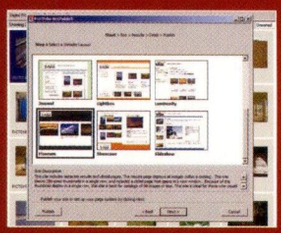
■ **What's bad:** Quite pricey, but the features speak for themselves

**OVERALL PERCENTAGE: 90%**

## Making the most of your creations



■ *Creating a catalogue of your digital media files is easy if you follow the Wizard. Once archived, the folder sync tool ensures that it remains up-to-date*



■ *Portfolio enables users to turn their images into professional-looking Web galleries. Just select the required images, pick a template and let the program do the rest*

# TOON BOOM STUDIO 2.5

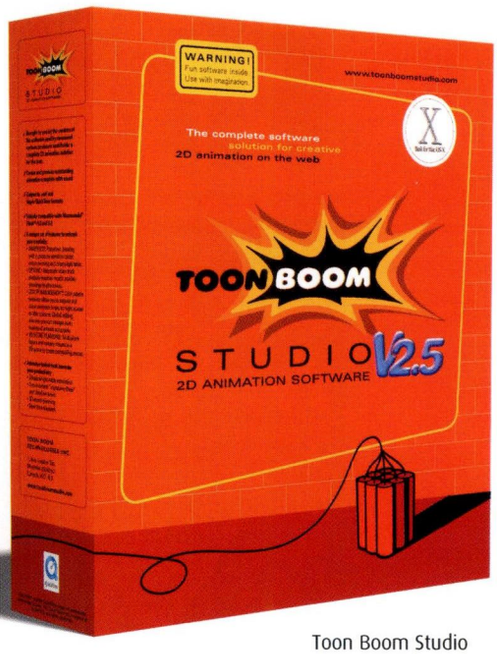
## Fancy trying your hand at cartoons but feel constrained by Flash? Toon Boom Studio gives users a real feel for the animated high-life

**There's something of a 3D feel to Toon Boom Studio. There's the multi-window layout including Side, Top and Perspective views, camera tracking that can follow motion paths, a Timeline that allows drag-and-drop parenting of elements and the ability to clone elements too.** Then there is the 2D graphics angle – alpha channel effects, object masking and drawing and retouching tools. There is even Flash file import and export for Web design purposes.

Although at first glance it appears to be a bit of a mixed-up application, it definitely delivers the goods in terms of animation. In Toon Boom, you create scene elements in Drawing mode using traditional drawing and retouching tools and animate simple drawings in an onion skin workflow. Bitmaps (including PSD files) can be imported and vectorised and you can also scan in images for use. You then move up to Scene Planning mode to set up camera moves and object interactions based on a Timeline. Side and Top views make it simpler than other applications to place your elements over time, simultaneously keeping scale and distance easy to control. Using a traditional cel animation metaphor, elements are attached to a 'peg' to make them move in space. The various views and properties palettes then allow you to control the arrangement of several elements over time as the pegged camera moves through the scene. When viewed as a series of animated frames, gaps can appear in drawings, but previously any retouching had to be done in Drawing mode, which lost the placing of relative elements. This version features the ability to draw directly in Scene Planning mode, using the drawing tools to retouch elements on a single (the worst affected) frame in the Camera View window.

You can add professional transitions to scenes by using Clipping Effect elements. These use clip elements and a mask in the form of a vector drawing element to selectively hide or reveal parts of the underlying layers, according to set parameters. The mask vector element can be associated with a peg, in order to move the mask with the action.

**"Although at first glance it appears to be a bit of a mixed-up application, it definitely delivers the goods in terms of animation"**




### Specifications

| | |
|---|---|
| **Product:** | Toon Boom Studio |
| **URL** | www.toonboom.com |
| **Operating system:** | **PC/Mac** |
| **System requirements:** | **PC**<br>Windows 98 or higher<br>Pentium III or faster<br>256Mb RAM<br>100Mb hard disk space |
| **System requirements:** | **Mac**<br>Mac OS X 10.3<br>G4 processor or higher<br>256Mb RAM<br>100Mb hard disk space |

### Go cartoon crazy

Sound in the form of QuickTime import and export is supported and fairly advanced lip-syncing and sound scrubbing becomes a simple matter for this application. Effects such as colour transforms and transparency can also be added and keyframed into the animation. Color Transform elements specify how the colours in the drawings or image elements attached to them will change over time.

A very welcome extension to this tool is the ability to clone the Color Transform element and attach it to other elements to affect them, rather than have to duplicate the whole process each time you make alterations. What's more, all of the information stored in the effect is duplicated, so you don't have to recreate keyframes or their values. If you update any values in any of the clones, TBS will update all the other clones with the new values.

Capable of top-quality output (it was used in the making of the Oscar-winning *Belleville Rendez-vous*) Toon Boom Studio has a professional feel and is as versatile as other 2D animation applications, like Flash for instance. The difference is that it uses function curves instead of scripting, and newcomers to the animation game may find the program tricky to get used to.

The lack of a proper manual especially rankles, particularly as this is a fairly esoteric application and some of the interface functionality is a bit behind the times (some of the non-floating windows were a pain to use), but there's no doubting the power of this software. Definitely worth a look if you are at all interested in, and serious about, 2D animation. There is much creative potential to explore here. ■

### Verdict

Digital CreativeArts

**Product:** Toon Boom Studio v 2.5
**Sales hotline:** 01462 433558 [UK only]
**Price:** £280.83 [inc VAT]

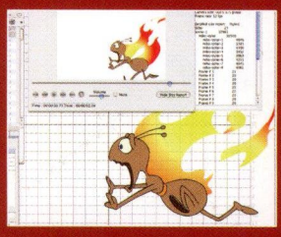
| | |
|---|---|
| **Ease of use:** | ■■■□□ |
| **Features:** | ■■■■□ |
| **Quality of results:** | ■■■■■ |
| **Value for money:** | ■■■■■ |

■ **What's good:** Improved drawing/sound support, automation features and cloning, advanced lip-synching, support for Mac OS X

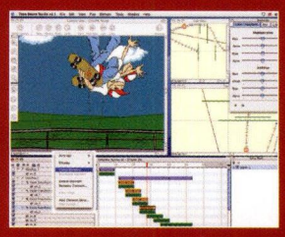
■ **What's bad:** No manual with downloaded version – to get it costs extra

**OVERALL PERCENTAGE: 89%**

## That's not all, folks!



■ *Drawing mode offers a grid for positioning, a 'light table' for rotating the drawing and an onionskin mode to set up animation. Movies can be exported in Flash*



■ *TBS offers a versatile workspace for assembling animated elements and creating a motion path with pegs. Effects can be applied to elements in the Timeline*

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# Impulse buy

creative buyers' guide

# Impulse buy

## Find the right kit for your needs with our impartial and unbiased guide to creative hardware and software

Here at ***DCA*** we're committed to accuracy, but occasionally a mistake can creep in. If you spot an error or would like to update your listing, please contact **dca@digitalcreativearts.co.uk**

**Welcome to Impulse Buy, the *Digital Creative Arts* Buyers' Guide. Over the course of the next five pages, we'll be highlighting some of the best buys in the world of digital creative equipment and software, helping you to make an informed decision on your latest indulgence.**

As each issue goes by, we'll be adding in details of each review published, which will join our overview of many of the key pieces of equipment and software on the market. Each entry comes with contact details and guidelines on how much you should expect to pay.

Before splashing out on an expensive piece of kit, though, it's vital that you know your rights. The best piece of advice we can offer is that you make your purchases with a credit card whenever possible. Credit card purchases are insured under the terms of your credit agreement, so you'll be protected from fraudulent sales and faulty goods. Secondly, steer clear of expensive hire purchase deals. Shop around for a better value loan before being pressured into taking out a high interest deal. Also be wary of retailers that try to sell you extended warranties or after care plans. There's usually only one reason these are touted: to bump up the reseller's margin.

### It doesn't work

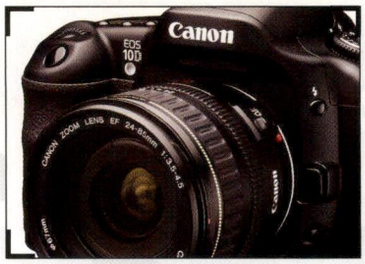
Without a doubt the most common problem you'll encounter is faulty goods. UK law makes it very clear what your rights are as a consumer with regard to this and the supplier is always responsible for ensuring that goods are fit for their purpose and are of merchantable quality or, in other words, that they work. If your kit is faulty then you should return it to the supplier immediately and not the manufacturer.

One thing that we can't stress enough is that you don't agree to faulty goods being repaired, because you'll lose your legal right to reject the goods and ask for a refund. Insist instead that the supplier provides you with either a replacement or a full refund.

In the unlikely event that you experience more serious problems with a retailer, contact your nearest Trading Standards office. The number should be in your local phone book. And if you want to get problems with troublesome stores off your chest, you can let off steam by emailing **dca@digitalcreativearts.co.uk**

# Impulse buy

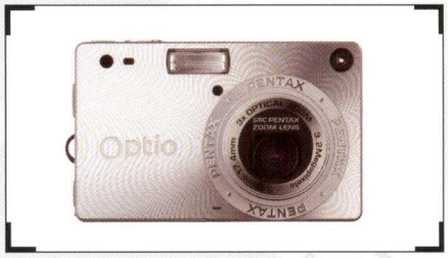
## digital cameras & camcorders




THE GLUT OF DIGITAL CAMERAS AND CAMCORDERS ON THE MARKET CAN MAKE IT DIFFICULT TO DECIDE WHICH ONE TO BUY. READ ON FOR AN OVERVIEW OF THE BEST MODELS

### Buying the right digicam

The most important aspect of any digicam is the number of megapixels used to record an image – going for four or five is a safe bet. Most digicams are compacts, meaning they're small in size and can easily fit in a pocket, but they tend to rely on automatic settings. If you are going to need to take difficult or unusual shots, you may want to opt for a digital SLR (Single Lens Reflex) camera that will give you much more control over your pictures, but for a hefty price. Where memory cards are concerned, try to go for at least 128Mb.




## DIGITAL CAMERAS

IMPULSE BUY

| MAKE & MODEL | PRICE (UK) | PRICE (US) | URL | TELEPHONE | MEGAPIXELS | ZOOM | LENS DATA | STORAGE MEDIA |
|---|---|---|---|---|---|---|---|---|
| **Pentax Optio 33WR** | £198 | $369 | www.pentax.co.uk | 01753 792792 | 3.2 | 2.8 opt, 4 dig | f2.8-f3.9 | SD/MMC |
| With a weatherproof case, this is a great camera to take outdoors | | | | | | | | |
| **Canon Powershot A80** | £198 | $499 | www.canon.co.uk | 01737 220000 | 4.0 | 3x opt, 3.6x dig | f2.8-f4.9 | CF I |
| Compact and full of features, but a little on the heavy side | | | | | | | | |
| **Casio QV-R41** | £249 | $369 | www.casio.co.uk | 0208 208 9460 | 4 | 3x opt, 4x dig | f2.8-4.9 | SD/MMC/Internal |
| Slim and portable with all the features expected for the price | | | | | | | | |
| **Fuji FinePix S5000 Zoom** | £249 | $599 | www.fuji.co.uk | 0207 586 1477 | 3.1 (6.0) | 10x opt 2.2x dig | f2.8-f8.0 | xD Picture Card |
| SLR looks at a bargain price, but interpolated image quality is a letdown | | | | | | | | |
| **Olympus C-760UZ** | £279 | $599 | www.olympus.co.uk | 0207 253 2772 | 3.2 | 10x opt, 3x dig | f2.8-f3.7 | xD Picture Card |
| A strong optical zoom dominates this responsive and versatile digicam | | | | | | | | |
| **Casio Exilim EX-Z40** | £299 | $399 | www.exilim.co.uk | 0208 450 9131 | 4 | 3x opt, 4x dig | f2.6-f4.3 | SD/MMC/Internal |
| Small and lightweight with a very decent output and at a decent price too | | | | | | | | |
| **Sony Cyber-shot DSC-V1** | £349 | $599 | www.sony.co.uk | 0207 365 2947 | 5.0 | 4x opt, 4x dig | f2.8-4.0 | Memory Stick/Pro |
| Good for a starter camera with great levels of control | | | | | | | | |
| **Canon Powershot G5** | £399 | $799 | www.canon.co.uk | 01737 220000 | 5.0 | 4x opt, 4x dig | f2.0-f3.0 | CF I/II, Microdrive |
| Canon's stunning mid-range digicam boasts great build quality and strong image quality | | | | | | | | |
| **Fuji S7000 ZOOM** | £429 | $899 | www.fuji.co.uk | 0207 586 1477 | 6.3 (12.3) | 6x opt, 3.2x dig | f2.8-f8 | xD/Microdrive |
| Fully featured on the face of it, but let down by overly aggressive JPEG compression | | | | | | | | |
| **Olympus C-5060 Wide** | £459 | $799 | www.olympus.co.uk | 0207 253 2772 | 5.1 | 4x opt, 3.5 dig | f2.8-f4.8 | xD, CF I/II, Microdrive |
| Magnesium body makes this one tough cookie, but its small size is a bonus | | | | | | | | |
| **Pentax Optio 555** | £499 | $599 | www.pentax.co.uk | 01753 792792 | 5.0 | 5x opt, 4x dig | f2.8-f4.6 | SD/MMC |
| A decent mid-range compact camera, durable and with excellent build quality | | | | | | | | |
| **Nikon Coolpix 5400** | £499 | $599 | www.nikon.co.uk | 0870 7700 233 | 4 | 4x opt, 4x dig | f2.8-f4.6 | CF I/II |
| Great image quality and a high-spec lens make this an adaptable model | | | | | | | | |
| **Nikon Coolpix 5700** | £499 | $899 | www.nikon.co.uk | 0870 7700 233 | 5 | 8x opt, 4x dig | f2.8-f4.2 | CF I/II |
| Another five-megapixel camera, this time from the fine Coolpix range | | | | | | | | |
| **Sony DSC-F828** | £679 | $1,099 | www.sony.co.uk | 0207 365 2947 | 8.0 | 7x opt, 14x dig | f2.0-f2.8 | CF, MS PRO, Microdrive |
| The latest Sony boasts the first eight-megapixel CCD but suffers purple fringing | | | | | | | | |
| **Minolta DiMAGE A2** | £699 | $1,399 | www.minolta.co.uk | 01908 200400 | 8.3 | 7x opt, 2x dig | f2.8-f3.5 | CF,SD,Microdrive |
| Konica Minolta's updated flagship prosumer model is a joy to use and packs a whopping 8MP punch | | | | | | | | |
| **Canon EOS 300D SLR** | £749 | $854 | www.canon.co.uk | 01737 220000 | 6.3 | By Lens | By Lens | CF I/II, Microdrive |
| Outstanding camera that delivers amazing photos. A top buy | | | | | | | | |
| **Canon PowerShot Pro 1** | £799 | $1,099 | www.canon.co.uk | 01737 220000 | 8 | 7x opt, 3.2x dig | f2.4-f3.5 | CF I/II, Microdrive |
| A robust model that offers great image quality | | | | | | | | |
| **Olympus E-1 SLR** | £999 | $1,499 | www.olympus.co.uk | 0207 253 2772 | 5.0 | By Lens | By Lens | CF I/II, Microdrive |
| Fast response and professional features make this a favourite | | | | | | | | |
| **Nikon D100 SLR** | £1,149 | $1,999 | www.nikon.co.uk | 0870 7700 233 | 6.1 | By Lens | By Lens | CF I/II, Microdrive |
| Delicious picture quality and fast superior handling | | | | | | | | |
| **Canon EOS 10D SLR** | £1,159 | $1,999 | www.canon.co.uk | 01737 220000 | 6.3 | By Lens | By Lens | CF I/II |
| Outstanding picture quality with practically non-existent image noise | | | | | | | | |
| **Pentax *ist D SLR** | £1,199 | $1,799 | www.pentax.co.uk | 01753 792792 | 6.1 | By Lens | By Lens | CF I/II, Microdrive |
| A bargain for the price, compact and easily manageable | | | | | | | | |
| **Fujifilm FinePix s2 Pro** | £1,449 | $2,049 | www.fuji.co.uk | 0207 586 1477 | 6.17 (12.1) | By Lens | By Lens | xD Microdrive |
| Appealing professional-spec camera that's straightforward to use | | | | | | | | |
| **Nikon D1x SLR** | £3,499 | $3,899 | www.nikon.co.uk | 0870 7700 233 | 5.47 | By Lens | By Lens | CF I/II, Microdrive |
| Virtually perfect performance, but a tricky one to get used to | | | | | | | | |
| **Canon EOS 1Ds SLR** | £5,999 | $8,999 | www.canon.co.uk | 01737 220000 | 11.1 | By Lens | By Lens | CF I/II |
| The choice of the professionals, a 35mm CMOS sensor delivers stunning results | | | | | | | | |

* SLR PRICES ARE FOR CAMERA BODY ONLY

### HOTPICKS

UNDER £300

#### Pentax Optio 33WR

Water was once the most feared enemy of the digital camera, but no more, because Pentax delivers its first waterproof three-megapixel digicam. While it's not designed to take out on a dive, it can happily withstand being submerged in water up to a depth of a metre.

UNDER £1,000

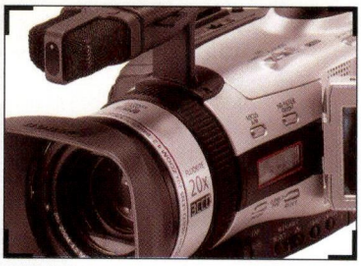
#### Canon EOS 300D

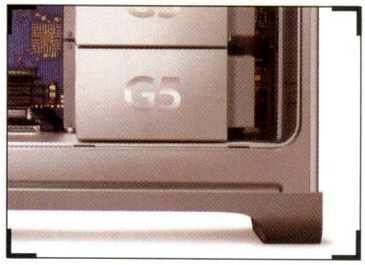
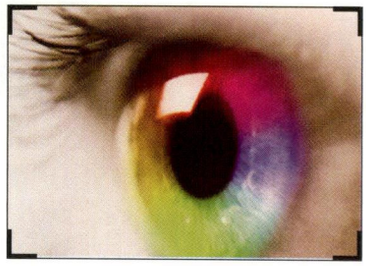
Anyone who has been trying to get hold of a Canon EOS 300D will know how difficult they have been to find, but thankfully the short supply is now being rectified. Frankly, it was worth the wait, as this is a stunning digital SLR, which boasts immaculate image quality.

UNDER £2,000

#### Pentax *ist D SLR

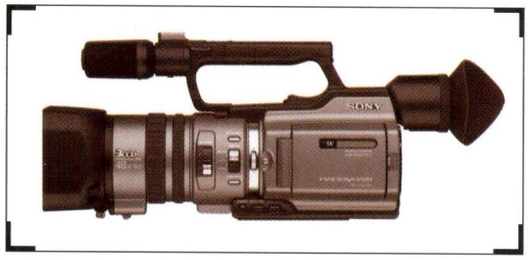
Great quality is a requirement at this sort of price, but what makes this camera so appealing is its size, weight and shape. Being an SLR it'll still look bulky with a lens attached, but its compactness makes for much more manoeuvrability when shooting.



## Choosing a digital video camera

The first thing to do when you're buying a digital camcorder is ensure that you try out as many as you can. The difference in size and weight between models can be tremendous, so it's important to find a camcorder that feels comfortable. Controls can be positioned all over the place, and because you'll be pressing them one-handed, it's crucial you can get to all the important buttons. Small camcorders are often a bonus, but their tiny stature can make them fiddly and awkward to use.



## DIGITAL CAMCORDERS IMPULSE BUY

| MAKE & MODEL | PRICE (UK) | PRICE (US) | URL | TELEPHONE | FORMAT | MEGAPIXELS | ZOOM | INTERFACE |
|---|---|---|---|---|---|---|---|---|
| **Samsung VP-D101** | £289 | N/A | www.samsungelectronics.co.uk | 0870 242 0303 | MiniDV | 0.8 | 16x opt, 900x dig | FireWire |
| Decent specs and usability make this a worthwhile purchase | | | | | | | | |
| **JVC GR-D23** | £299 | N/A | www.jvc.co.uk | 0870 330 5000 | MiniDV | 0.8 | 16x opt, 700x dig | FireWire |
| A great beginner camcorder with abilities far beyond its price | | | | | | | | |
| **Panasonic NV-GS11B** | £299 | N/A | www.panasonic.co.uk | 0870 906 8357 | MiniDV | 0.8 | 24x opt, 800x dig | FireWire |
| Straightforward model with good colour reproduction | | | | | | | | |
| **Sony DCRHC14E** | £349 | N/A | www.sony.co.uk | 0207 365 2947 | MiniDV | 0.8 | 10x opt, 640x dig | FireWire |
| This tiny camcorder packs in many features, but is a little overpriced | | | | | | | | |
| **Panasonic NV-GS22B** | £349 | N/A | www.panasonic.co.uk | 0870 906 8357 | MiniDV | 0.8 | 10x opt, 500x dig | FireWire |
| Fantastic quality camcorder with good functionality and build | | | | | | | | |
| **JVC GR-DX57** | £459 | N/A | www.jvc.co.uk | 0870 330 5000 | MiniDV | 0.8 | 12x opt, 700x dig | FireWire |
| A fun camcorder with fair price and specs | | | | | | | | |
| **JVC GR-DX97** | £499 | N/A | www.jvc.co.uk | 0870 330 5000 | MiniDV | 0.8 | 12x opt 700x dig | FireWire |
| JVC has done well with this mid-range camcorder | | | | | | | | |
| **Panasonic NV-GS55B** | £499 | $599 | www.panasonic.co.uk | 0870 906 8357 | MiniDV | 0.8 | 10x opt, 500x dig | FireWire |
| Great features if you're after a mid-range DV camera | | | | | | | | |
| **Sharp VL-Z3H** | £529 | $479 | www.sharp.co.uk | 0800 262958 | MiniDV | 0.8 | 10x opt, 500x dig | FireWire |
| Flexible camcorder featuring a free angle swivel grip and SD/MMC memory card slot for stills | | | | | | | | |
| **JVC GR-D230** | £529 | $699 | www.jvc.co.uk | 0870 330 5000 | MiniDV | 1.33 | 10x opt, 200x dig | FireWire |
| High-quality output with excellent resolution | | | | | | | | |
| **Panasonic NV-Gs120EB** | £599 | $699 | www.panasonic.co.uk | 0870 906 8357 | MiniDV | 3x 0.3 | 10x opt, 500x dig | FireWire |
| A 3CCD camera for under £1,000 is an irresistible proposition | | | | | | | | |
| **Sony DCRDV91E** | £599 | N/A | www.sony.co.uk | 0207 365 2947 | DVD | 0.8 | 10x opt, 120x dig | USB |
| Looks great, feels great in the hand and boasts the latest hot format too | | | | | | | | |
| **Canon MVX250i** | £649 | N/A | www.canon.co.uk | 01737 220000 | MiniDV | 1.33 | 18x opt, 360x dig | FireWire |
| Small, lightweight but big on features and quality, a bargain at the price | | | | | | | | |
| **Sony DCRDVD201E** | £749 | $999 | www.sony.co.uk | 0207 365 2947 | DVD | 1 | 10x opt, 120x dig | USB |
| Ergonomic design and large LCD screen make this a great model to start shooting with | | | | | | | | |
| **Sony DCR-PC109E** | £749 | $1,399 | www.sony.co.uk | 0207 365 2947 | MiniDV | 1.07 | 10x opt, 120x dig | FireWire |
| Petite and pretty, this is great for the style-conscious | | | | | | | | |
| **Canon MVX10i** | £799 | $1,299 | www.canon.co.uk | 01737 220000 | MiniDV | 1.77 | 10x opt, 200x dig | FireWire |
| Canon's high quality shines through on this straightforward model | | | | | | | | |
| **Panasonic NV-GS200** | £859 | $999 | www.panasonic.co.uk | 0870 906 8357 | MiniDV | 3x 0.4 | 10x opt, 500x dig | FireWire |
| Plenty of features and improved image quality thanks to 3CCDs | | | | | | | | |
| **Canon MVX25i** | £899 | $1,699 | www.canon.co.uk | 01737 220000 | MiniDV | 2.2 | 14x opt, 280x dig | FireWire |
| An absolute little powerhouse hides underneath an ordinary casing | | | | | | | | |
| **Sony DCR-HC1000** | £999 | $1,399 | www.sony.co.uk | 0207 365 2947 | MiniDV | 3x 1.07 | 12x opt, 150x dig | FireWire |
| This semi-pro model produces excellent video quality with its 3CCDs | | | | | | | | |
| **Sony DCRIP1** | £1,199 | $1,199 | www.sony.co.uk | 0207 365 2947 | Micro MV | 1.0 | 10x opt, 120x dig | FireWire |
| Absolutely tiny, but packed with features. Not for those with large hands | | | | | | | | |
| **Canon XM2** | £1,599 | $2,999 | www.canon.co.uk | 01737 220000 | MiniDV | 3x 0.3 | 20x opt, 100x dig | FireWire |
| Our star digital camcorder, we use it ourselves. Three CCD chips give truly professional results | | | | | | | | |
| **JVC GR-PD1** | £1,599 | $3,499 | www.jvc.co.uk | 0870 330 5000 | MiniDV | 1.18 | 10x opt, 200x dig | FireWire |
| Great for shooting, but computer compatibility issues are a real hindrance | | | | | | | | |
| **Canon XL1S** | £2,299 | $4,499 | www.canon.co.uk | 01737 222000 | MiniDV | 3x 0.3 | 16x opt, 32x dig | FireWire |
| Top quality with all the trimmings plus the bonus of five hours of battery life | | | | | | | | |
| **Sony DCR-VX2100** | £2,699 | $2,999 | www.sony.co.uk | 0207 365 2947 | MiniDV | 3x 0.4 | 12x opt, 48x dig | FireWire |
| Superior low-light performance thanks to one Lux minimum illumination | | | | | | | | |

## HOTPICKS

UNDER £700

### Canon MXV150i

You can't go far wrong with a Canon camcorder, and this mid-range model is certainly no exception. It's solid and robust, is straightforward to use and turns out quality images with impressive colour reproduction. You can't say fairer than that.

UNDER £1,000

### Panasonic NV-GS200

Another new addition to the camcorder scene, Panasonic's latest introduces an improved 3CCD image sensor arrangement for increased picture clarity. If you're looking for a cost-effective but good-quality DV camera, be sure to take this model for a spin. It's bound to impress.

£1,500+

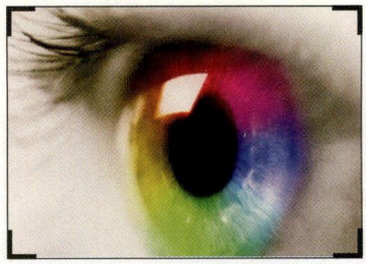
### Sony DCRVX 2100

In what has been a slow season for professional camcorders, this refined model from Sony is still king of the hill. Despite a hefty price tag, this camcorder is great for shooting in low-light conditions thanks to an innovative low-lux system.

# Impulse buy

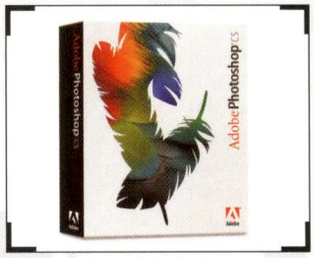
software

WHETHER YOU'RE BUYING NEW OR UPGRADING FROM A PREVIOUS VERSION, WE LAY OUT THE BEST SOFTWARE FOR YOUR CREATIVE PROJECTS



## Buying the right software

The list below contains all the information you'll need if you're planning to splash out on new software. Picking a new application is not quite as straightforward as picking new hardware, because the most expensive package is not always the best for your needs. Read through the descriptions in our guide to work out which solution is a perfect fit for you and check our recommendations in the sidebar to help you choose.




## SOFTWARE IMPULSE BUY

### DIGITAL VIDEO

| PROGRAM | PRICE (UK) | PRICE (US) | UPGRADE PRICE (UK/US) | URL | TELEPHONE | PLATFORMS | SYSTEM REQ |
|---|---|---|---|---|---|---|---|
| **Apple Final Cut Express 2** | £199 | $299 | £69/$99 | www.apple.com/uk | 0800 039 1010 | Mac | G4, OS X 10.2 |
| The new and improved version of Apple's stunning video editor | | | | | | | |
| **Ulead DVD Workshop 2** | £299 | $495 | £129/$249 | www.ulead.co.uk | 0221 3108 830 | PC | P3, Win 2000 |
| Ulead's new DVD authoring software is here, and proves to be both versatile and easy to use | | | | | | | |
| **Sony Vegas 5** | £395 | $559 | N/A | www.sonypictures.com | N/A | PC | P3, Win 2000 |
| This is worth every penny for its professional interface | | | | | | | |
| **Avid Xpress DV 3.5** | £430 | $695 | N/A | www.avid.co.uk | 01753 655999 | PC/Mac | P4/G4,Win 2000,OS X 10.1 |
| Stripped-down version of Avid's famous editing system | | | | | | | |
| **Adobe Encore DVD 1.5** | £452 | $549 | £81/$99 | www.adobe.co.uk | 0131 458 6842 | PC | P3, Win XP |
| Authoring a DVD has never been easier thanks to Adobe's excellent software | | | | | | | |
| **Adobe Premiere Pro 1.5** | £617 | $699 | £81/$99 | www.adobe.co.uk | 0131 458 6842 | PC | P3, Win XP |
| An expensive yet ultimately superb piece of editing software | | | | | | | |
| **Pinnacle Liquid Edition Pro 5.5** | £629 | $999 | £139/$199 | www.pinnaclesys.com | 0207 3090 257 | PC | P4, Win 2000 |
| A quality video editing package, but with an awkward interface to master | | | | | | | |
| **Apple Final Cut Pro HD** | £699 | $999 | £279/$399 | www.apple.com | 0800 039 1010 | Mac | G4 OS X 10.3 |
| Big brother of Final Cut Express and jam-packed with professional-standard features | | | | | | | |
| **Discreet Combustion 3** | £877 | $995 | £163/N/A | www.discreet.com | 0118 934 6121 | PC/Mac | P3/G4, Win 2000/OS X 10.2 |
| All you could ever need in a creative package including paint, animation and 3D composition features | | | | | | | |
| **Adobe After Effects 6.5 (Pro)** | £1,075 | $999 | £81/ | www.adobe.co.uk | 0131 458 6842 | PC/Mac | P3/G4, Win 2000/OS X 10.3 |
| The ultimate in post-production effects software | | | | | | | |
| **Avid Xpress Pro** | £1,199 | $1,695 | £240/N/A | www.avid.co.uk | 01753 655999 | PC/Mac | P4/G4, Win 2000, OS X |
| Real-time editing at its best | | | | | | | |
| **Red Giant Magic Bullet** | £1,351 | $1,995 | N/A | www.redgiantsoftware.co.uk | 0287 9632 614 | PC/Mac | Win 2000/OS 9 |
| Remarkable post-production suite allowing you to make DV appear like film | | | | | | | |
| **Adobe Video Collection Pro** | £1,568 | $1,499 | £205/$249 | www.adobe.co.uk | 0131 458 6842 | PC | P3, Win XP |
| The latest and greatest, yet sadly most costly Adobe software bundle. Worth every penny, though | | | | | | | |

### DIGITAL IMAGING

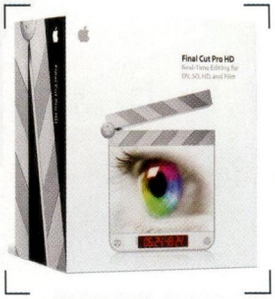
| PROGRAM | PRICE (UK) | PRICE (US) | UPGRADE PRICE (UK/US) | URL | TELEPHONE | PLATFORMS | SYSTEM REQ |
|---|---|---|---|---|---|---|---|
| **Paint Shop Pro 8** | £99 | $99 | N/A | http://uk.jasc.com/ | 01295 258335 | PC | P2 Win98+ |
| A good piece of software for beginners or those on a budget | | | | | | | |
| **AlienSkin Triple Bundle** | £167 | $299 | N/A | www.alienskin.com | 001 919 832 4124 | PC/Mac | N/A |
| New Photoshop plug-in bundle, including Eye Candy 4000, Splat! And Xenofex 2 | | | | | | | |
| **Macromedia FreeHand MX** | £299 | $399 | £79/$99 | www.macromedia.co.uk | 01314 586766 | PC/Mac | P3/G3, Win 98/OS X 10.2 |
| The perfect tool for sketch and illustration work for either Web or print | | | | | | | |
| **Corel Painter 8** | £366 | $299 | £149/$149 | www.corel.co.uk | 01628 589800 | PC/Mac | P3/G3, Win 98/OS 9 |
| New and improved, Corel delivers its best paint program yet | | | | | | | |
| **Corel Graphics Suite 12** | £421 | $399 | £210/$179 | www.corel.co.uk | 01628 589800 | PC | P2, Win 2000 |
| Hot new smart tools make this a great alternative to Adobe's Creative Suite | | | | | | | |
| **Adobe Illustrator CS** | £511 | $499 | £163/$169 | www.adobe.co.uk | 0131 458 6842 | PC/Mac | P3/G3,Win 2000/OS X 10.2 |
| Much revered vector illustration tool from Adobe | | | | | | | |
| **Adobe Photoshop CS** | £605 | $649 | £147/$169 | www.adobe.co.uk | 0131 458 6842 | PC/Mac | P3/G3,Win 2000/OS X 10.2 |
| It's here and it's what everybody wanted, the latest Photoshop software | | | | | | | |
| **Adobe InDesign CS** | £715 | $699 | £163/$169 | www.adobe.co.uk | 0131 458 6842 | PC/Mac | P2/G3, Win 2000/OS X 10.2 |
| Compatible with the rest of the Adobe product range, this is the program to meet your layout needs | | | | | | | |
| **Adobe Creative Suite Premium** | £1,115 | $1,229 | £663/$749 | www.adobe.co.uk | 0131 458 6842 | PC/Mac | P3/G3,Win 2000/OS X 10.2 |
| Expensive, but appealing and useful for the multi-talented digital creative | | | | | | | |

## HOTPICKS

DIGITAL VIDEO

### Apple Final Cut Pro HD

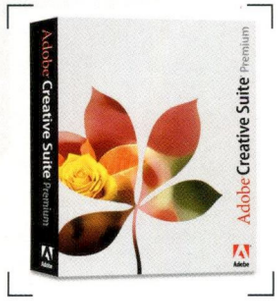
Getting more and more professional with every incarnation, the best thing about Final Cut Pro HD is that it's such a pleasure to use. Flexing real editing muscle is an impressive feat in itself, but to do it with this much grace is a genuine achievement. Now with added HD capabilities, this program could tempt even the most strident PC supporter over to the Mac.




DIGITAL IMAGING

### Adobe Creative Suite Premium

It's the biggest and the best, and anyone that doesn't already own Adobe's mammoth Creative Suite Premium Edition must spend every night dreaming about it. Packing in Photoshop, Illustrator, InDesign, GoLive, Acrobat Professional and Version Cue, this is – marketing hype aside – essentially an entire design studio in a box. All you need to bring to the party is the talent.



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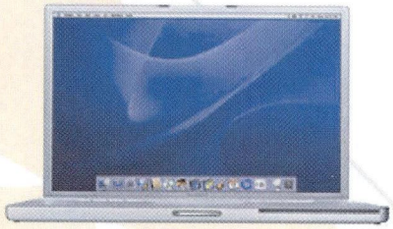
Video

## 17" Super Drive PowerBook

- 1GB DDR333 SDRAM - 2 SO-DIMMs
- ATI Mobility Radeon 9700 - 128MB
- 80GB Ultra ATA drive (4200rpm)
- Backlit Keyboard & Mac OS
- 1.5GHz PowerPC G4
- 17-inch TFT display
- 56K internal modem
- Power Adapter
- Battery



**£1,830 + VAT**

## Dual 2.5GHz PowerPC G5

- 2GB DDR400 SDRAM (PC3200) - 2x1GB
- 160GB Serial ATA
- DVD-R/CD-RW
- ATI Radeon 9800 XT 256MB, ADC/DVI
- 56k V.92 modem
- Apple Keyboard & Mouse
- Mac OS X
- Apple Cinema HD Display (23" LCD)
- One FireWire 800 port
- Two FireWire 400 ports
- Three USB 2.0 ports
- Apple Mouse

**£3,875+VAT**

## Dual 1.8GHz PowerPC G5

- 1GB DDR400 SDRAM (PC3200) - 2x512MB
- 80GB Serial ATA
- DVD-R/CD-RW
- ATI Radeon 9600 XT 128MB, ADC/DVI
- 56k V.92 internal modem
- Apple Keyboard & Mouse
- Mac OS X
- Apple Studio Display (17" LCD)
- One FireWire 800 port
- Two FireWire 400 ports
- Three USB 2.0 ports
- Apple Mouse

**£1,799 + VAT**

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**PANASONIC AG-DVX100AE**
**£2,250+VAT**

**Sony DSR-45**
**£2,350+VAT**

**Sony DSR-PD170P**
**£2,250+VAT**

**Canon XL1s KIT**
**£2,000+VAT**

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**£1,295+VAT**

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**£1,650+VAT**

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# Impulse buy

software, PCs and Macs

YOU CAN'T DO MUCH IN THE WAY OF DIGITAL CREATIVITY IF YOU'VE GOT A DUSTY OLD COMPUTER. MAYBE NOW'S THE TIME TO TREAT YOURSELF TO A NEW WORKSTATION

## SOFTWARE [CONTINUED]

IMPULSE BUY

### DIGITAL AUDIO

| PROGRAM | PRICE (UK) | PRICE (US) | UPGRADE PRICE (UK/US) | URL | TELEPHONE | PLATFORMS | SYSTEM REQ |
|---|---|---|---|---|---|---|---|
| **Apple GarageBand** | £39 | $49 | N/A | www.apple.com/uk | 0800 039 1010 | Mac | G3, OS X 10.2 |
| Make high-quality music with Apple's latest iLife '04 addition | | | | | | | |
| **FLStudio Producer Edition** | £83 | $149 | £22/$39 | www.flstudio.com | +32 900 1 0292 | PC | P2, Win98+ |
| Growing more detailed with every new version, Fruity Loops is going from strength to strength | | | | | | | |
| **Apple Soundtrack** | £149 | $199 | N/A | www.apple.com/uk | 0800 0391 010 | Mac | G4, OS X 10.2 |
| Music for movies or any other project is easy with Soundtrack | | | | | | | |
| **ReCycle 2.1** | £160 | $249 | £49/$76 | www.propellerhead.se | +46 855 608 400 | PC/Mac | P3/G3,Win 2000/OS X 10.2 |
| Creating Rex Loops has never been easier than in ReCycle | | | | | | | |
| **Adobe Audition** | £245 | $299 | £58/$69 | www.adobe.co.uk | 0131 458 6842 | PC | P3 Win 2000 |
| Once Cool Edit Pro, now updated and capable of dealing with any audio you throw at it | | | | | | | |
| **Ableton Live 4** | £274 | $499 | N/A | www.ableton.com | 01422 416590 | PC/Mac | P3/G3, Win 98/ OS 9 |
| Bring all your audio elements together in this production environment | | | | | | | |
| **Reason 2.5** | £299 | $499 | £59/$109 | www.propellerhead.se | +46 855 608 400 | PC/Mac | P2/G3, Win 98/OS X 10.1 |
| Propellerhead's offering is arguably the best standalone music software available | | | | | | | |
| **Pro Tools LE + mbox** | £360 | $449 | N/A | www.digidesign.com | 01753 655 999 | PC/Mac | P3/G3,Win XP/OS X 10.2 |
| The Mbox audio interface and the mighty Pro Tools in one bundle, what more do you need? | | | | | | | |
| **WaveLab 5** | £499 | $699 | £129/N/A | www.steinberguk.com | 020 8970 1909 | PC | P3, Win 2000 |
| Yet another excellent wave editor from Steinberg | | | | | | | |
| **Cubase SX 2** | £569 | $799 | £99/N/A | www.steinberguk.com | 020 8970 1 909 | PC/Mac | P4/G4,Win 2000/OS X 10.2 |
| A *DCA* favourite for sequencing and much more besides, get a copy now! | | | | | | | |
| **Restoration 4** | £672 | $1,200 | N/A | www.waves.com | 001 1 865 909 9200 | PC/Mac | P3/G3, Win 2000/ OS X 9 |
| One of the best audio cleaning, tweaking and retouching suites available | | | | | | | |
| **Emagic Logic Pro 6** | £699 | $999 | £149/$278 | www.emagic.de | 01462 480 500 | Mac | G3, OS 9 |
| Updated version of Emagic's stunning digital music producer | | | | | | | |

### 3D & ANIMATION

| PROGRAM | PRICE (UK) | PRICE (US) | UPGRADE PRICE (UK/US) | URL | TELEPHONE | PLATFORMS | SYSTEM REQ |
|---|---|---|---|---|---|---|---|
| **Swift 3D v4** | £104 | $189 | £50/$89 | www.swift3d.com | N/A | PC/Mac | P3/G4, Win 98/OS 8 |
| A cheap and effective way to break into 3D animation | | | | | | | |
| **Poser 5** | £179 | $319 | £95/$169 | www.curiouslabs.com | N/A | PC/Mac | P3/G3, Win 98/OS X 10.2 |
| Curious Lab's detailed and effective 3D studio | | | | | | | |
| **TrueSpace 6.6** | £334 | $595 | N/A | www.caligari.com | N/A | PC | P3, Win95+ |
| For illustration, design and animation, a superbly diverse package | | | | | | | |
| **Carrara Studio 3** | £357 | $399 | £142/$169 | www.eovia.com | 01483 797 498 | PC/Mac | P2/G3,Win 98/OS 9 |
| A useful 3D application at a satisfyingly low price | | | | | | | |
| **Cinema4D R8.5** | £499 | $595 | £99/$149 | www.maxonshop.com/uk | 01525 718181 | PC/Mac | P3/G4, Win 98/OS 9 |
| Now even better than before, Maxon's 3D package is a force to be reckoned with | | | | | | | |
| **LightWave 3D 8** | £945 | $1,395 | £345/$595 | www.newtek-europe.com/uk | N/A | PC/Mac | P3/G4,Win 2000/OS X 10.3 |
| A definite 3D favourite with pros and intermediates alike | | | | | | | |
| **Maya 6 Complete** | £1,449 | $1,999 | £659/$899 | www.alias.com | 01494 441 273 | PC/Mac | P4/G4, Win 2000/OS X 10.2 |
| Award-winning 3D software used in top Hollywood movies | | | | | | | |
| **Softimage\| XSI 4** | £1,498 (Essentials) | $1,995 | N/A | www.softimage.com | 01277 261 601 | PC | P4, Win 2000 |
| High-end, high-quality output, high price | | | | | | | |
| **3ds max 6** | £3,260 | $3,495 | £719/$795 | www.discreet.com | 0118 934 6121 | PC | P3, Win 2000 |
| One of our top picks and a must for anyone with the cash and drive for 3D | | | | | | | |

### WEB DESIGN

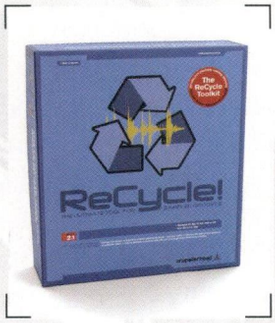
| PROGRAM | PRICE (UK) | PRICE (US) | UPGRADE PRICE (UK/US) | URL | TELEPHONE | PLATFORMS | SYSTEM REQ |
|---|---|---|---|---|---|---|---|
| **Fireworks MX 2004** | £249 | $299 | £129/$149 | www.macromedia.co.uk | 01314 586 766 | PC/Mac | P3/G3, Win 98/OS X 10.2 |
| Import and export graphics for your Web design projects | | | | | | | |
| **Dreamweaver MX 2004** | £339 | $399 | £169/$199 | www.macromedia.co.uk | 01314 586 766 | PC/Mac | P3/G3, Win 98/OS X 10.3 |
| A smooth and efficient Web design tool | | | | | | | |
| **Adobe GoLive CS** | £394 | $399 | £163/$169 | www.adobe.co.uk | 0131 458 6842 | PC/Mac | P3/G3,Win2000/OS X 10.2 |
| Yet another member of the CS family, GoLive is brought up to date | | | | | | | |
| **Macromedia Flash MX 2004** | £579 | $699 | £249/$299 | www.macromedia.co.uk | 01314 586 766 | PC/Mac | P3/G3,Win 98/OS X 10.2 |
| Superb Web graphics and animations at your disposal as well as interfaces and more | | | | | | | |
| **Macromedia Studio MX 2004** | £699 | $899 | £309/$399 | www.macromedia.co.uk | 01314 586 766 | PC/Mac | P3/G3,Win 98/OS X 10.2 |
| The best and most complete Web design studio containing a host of Macromedia's flagship software | | | | | | | |

## HOTPICKS

DIGITAL AUDIO

### ReCycle 2.1

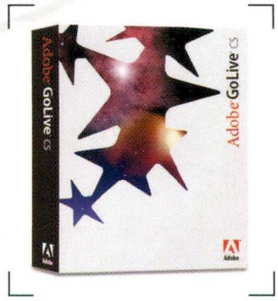
Now compatible with Mac OS X, this title has come on leaps and bounds since version one. Boasting full REX2 support, it allows you to chop up samples for audio compositions. As an added bonus, version 2.1 also comes with Reason Adapted and ReLoad, allowing users to convert samples into music files without having to import them into specialised sequencing software.

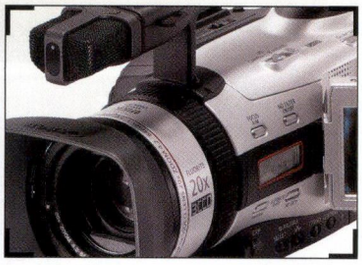


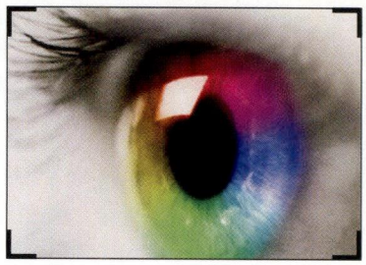

WEB DESIGN

### Adobe GoLive CS

This Web site creation tool now offers improved performance and a feature set to rival any other suite out there. With tighter integration into other Adobe CS titles, site designers will find building and transferring elements from one application to the next a much more organic affair. If you're already an Adobe user, this is well worth a look.







## Buying the right workstation

Buying the correct computer to suit your line of work or hobby is getting more and more difficult. With major advancements in both PC and Mac technology, the first question to ask yourself is, "what platform do I need?" When you have that sorted, you need to know how much power, space and memory is required to perform the tasks you will be asking of your system. Here's a feast of information to help you find your dream machine.

# WORKSTATIONS

IMPULSE BUY

### PCs

| PRODUCT | PRICE (UK) | PRICE (US) | URL | TELEPHONE | PROCESSOR | HARD DRIVE | MEMORY | OPTICAL DRIVE |
|---|---|---|---|---|---|---|---|---|
| **IBM A50p** | £939 | $887 | www.ibm.com/uk | 0870 542 6426 | 3GHz | 80Gb | 512Mb | DVD/CD-RW |
| The perfect IBM for your media projects at a good price | | | | | | | | |
| **Hi-Grade Ultis PV4** | £1,115 | $1,968 | www.higrade.com | 0208 532 6111 | 2.8GHz | 160Gb | 512Mb | DVD/CD-RW |
| Great specs but not as hot as its competitors | | | | | | | | |
| **FS Amilo D 1840** | £1,149 | N/A | www.fujitsu-siemens.co.uk | 0870 606 6677 | 3.2GHz | 80Gb | 1024Mb | DVD-RW |
| Amazing specs at a thoroughly reasonable price | | | | | | | | |
| **HP Compaq nx7010** | £1,153 | $1,449 | www.hp.com/uk | 0845 270 4215 | 1.6GHz | 40Gb | 256Mb | DVD/CD-RW |
| Good design but average specs for a notebook at this price | | | | | | | | |
| **AJP Neo-PC 4** | £1,174 | $2,418 | www.ajp.co.uk | 0208 208 9700 | 3.4GHz | 160Gb | 512Mb | DVD/CD-RW |
| Small and space-saving, yet still retaining power, an award-winning PC | | | | | | | | |
| **PB ixtreme MC 6112** | £1,199 | N/A | www.packardbell.co.uk | 0870 112 2334 | 2.6GHz | 120Gb | 512Mb | DVD-RW |
| Nice-looking and a good performer, great for home entertainment | | | | | | | | |
| **PB EasyNote E5 142** | £1,199 | N/A | www.packardbell.co.uk | 0870 112 2334 | 1.4GHz | 60Gb | 512Mb | DVD/CD-RW |
| Excellent spec machine at a fantastic price | | | | | | | | |
| **Sony PCGGRT995mp** | £1,299 | N/A | www.sony.co.uk | 0207 365 2934 | 2.8GHz | 60Gb | 512Mb | DVD/CD-RW |
| Not bad specs at all, and the price isn't bad either | | | | | | | | |
| **Sony PCV-V1** | £1,299 | N/A | www.sony.co.uk | 0207 365 2934 | 2.8GHz | 160Gb | 512Mb | DVD-RW |
| Is it a TV? No, it's a great-looking, high performance PC with TV capabilities | | | | | | | | |
| **PB ixtreme MC 6142** | £1,499 | N/A | www.packardbell.co.uk | 0870 112 2334 | 3.06GHz | 200Gb | 256Mb | DVD-RW |
| Another Media Centre with great specs | | | | | | | | |
| **Alienware Aurora Extreme** | £2,312 | $4,071 | www.alienware.co.uk | 0800 279 9751 | Athlon 64 | 120Gb | 1Gb | DVD/CD-RW |
| The alternative Alienware for those who prefer AMD Athlon processors | | | | | | | | |
| **Alienware Area 51 Extreme** | £2,334 | $4,110 | www.alienware.co.uk | 0800 279 9751 | 3.2GHz | 120Gb | 1Gb | DVD/CD-RW |
| What a machine! Designed with CPU and memory intensive use in mind | | | | | | | | |
| **Dell Precision M60** | £2,394 | $3,865 | www.dell.co.uk | 0870 152 4699 | 1.7GHz | 80Gb | 256Mb | DVD/CD-RW |
| Over-priced but solid notebook for creating on the move | | | | | | | | |
| **HP Compaq nw8000** | £3,077 | $4,121 | www.hp.com/uk | 0875 270 4215 | 1.7GHz | 60Gb | 512Mb | DVD/CD-RW |
| High price for this notebook, but it's built for speed and includes a meaty graphics card | | | | | | | | |
| **Dell Precision 650** | £7,050 | N/A | www.dell.co.uk | 0870 152 4699 | Dual 3.2GHz | 400Gb | 4Gb | DVD-RW |
| The best of the best. If you're looking for the ultimate power, look no further | | | | | | | | |

### APPLE MACS

| PRODUCT | PRICE (UK) | PRICE (US) | URL | TELEPHONE | PROCESSOR | HARD DRIVE | MEMORY | OPTICAL DRIVE |
|---|---|---|---|---|---|---|---|---|
| **eMac SuperDrive G4** | £699 | $999 | www.apple.com/uk | 0800 039 1010 | 1.25GHz | 80Mb | 256Mb | DVD-R/CD-RW |
| Great for digital video and other media at a low price | | | | | | | | |
| **iBook G4 12-inch** | £799 | $1,099 | www.apple.com/uk | 0800 039 1010 | 1GHz | 30Gb | 256Mb | DVD/CD-RW |
| The G4 iBook at an outstanding price, why wait? | | | | | | | | |
| **Apple Power Mac G4** | £1,349 | $1,774 | www.apple.com/uk | 0800 039 1010 | Dual 1.25GHz | 80Mb | 512Mb | DVD-R/CD-RW |
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| **iMac 17-inch SuperDrive** | £1,449 | $1,799 | www.apple.com/uk | 0800 039 1010 | 1.25GHz | 80Mb | 256Mb | DVD-R/CD-RW |
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| **iMac 20-inch SuperDrive** | £1,749 | $2,199 | www.apple.com/uk | 0800 039 1010 | 1.25GHz | 80Mb | 256Mb | DVD-R/CD-RW |
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| **PowerBook 17-inch** | £1,949 | $2,799 | www.apple.com/uk | 0800 039 1010 | 1.5GHz | 80Mb | 512Mb | DVD-R/CD-RW |
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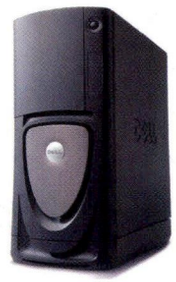
PC WORKSTATION

## Dell Precision 650

The most customisable and powerful of Dell's workstations, the Precision 650 is ideal for those looking for premium performance. With prices starting at £1,537, components can be upgraded and bolted on until it's turned into the ultimate PC goliath. There's support for dual Intel processors, up to 4Gb of RAM and multiple hard disks up to a maximum of 584Gb. If you have the cash, this is perfect.



APPLE WORKTOP

## Apple 20" iMac SuperDrive

For creative artists who like their machine to be as inspiring as their art, the aesthetic iMac SuperDrive is the only choice. Featuring a crystal clear 20-inch widescreen display, 1.25GHz of processing power and an 80Gb hard disk, you can rest assured that it can handle digital imaging tasks with ease. In addition, the iMac also packs a NVIDIA GeForce FX 5200 Ultra graphics card for increased rendering speeds for 3D applications.

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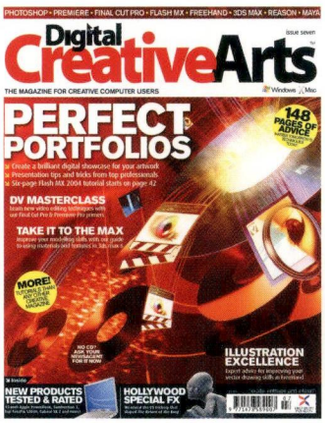
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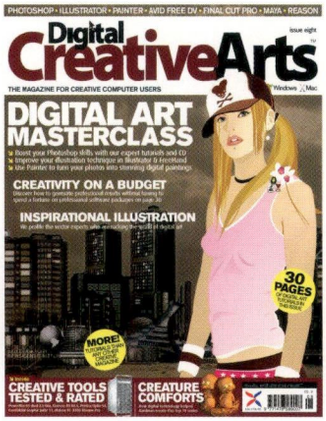
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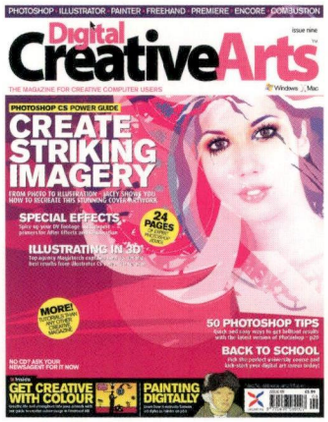


## ISSUE NINE

Learn how to create striking imagery in Photoshop as top illustrator Jacey shows you how to recreate our cover artwork. We've also got expert tutorials on adding special effects to digital video footage with After Effects and Combustion.

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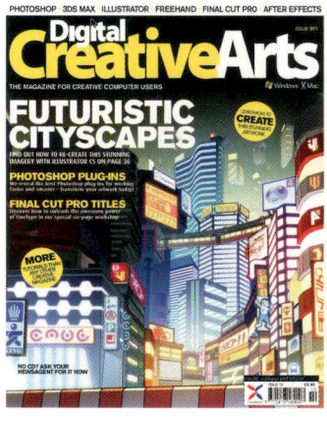
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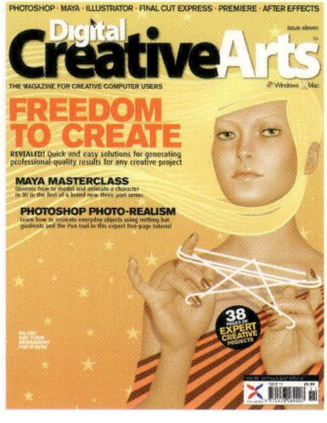
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## ISSUE ELEVEN

Find out how royalty-free images, video and audio can enhance your work, as we investigate the world of stock art. Also, get modelling with the first part of a Maya special and find out how to create photo-realistic illustrations in Photoshop.

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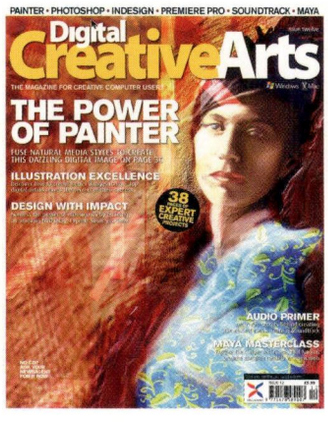


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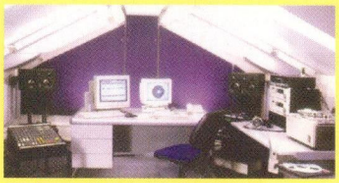

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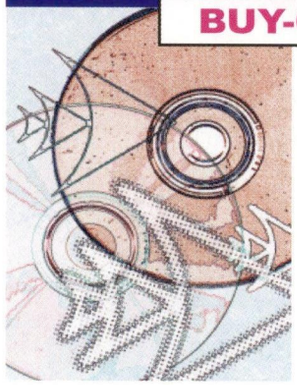

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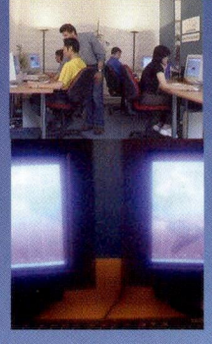

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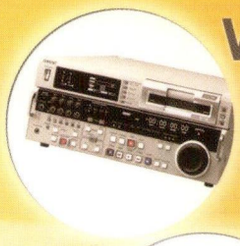

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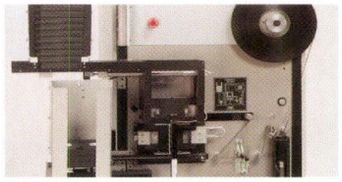

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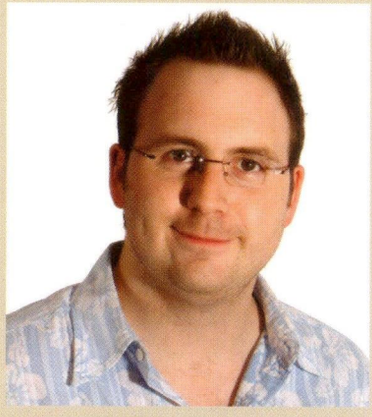
Seeing is learning! Master Photoshop's powerful tools
Discover how to pull off amazing effects with ease
PREMIERE PRO 1.5
FIND OUT WHAT'S NEW IN ADOBE'S REAL-TIME VIDEO EDITING SUITE
Take charge of effects with Bézier keyframes
Work smarter with Project Management tools
Explore our fully working 30-day try-out now!
ALIAS MAYA PLE
RETOUCHING PLUG-INS
PLUS! SUPPORT FILES FOR THE PROJECTS IN THE MAGAZINE



**STUART DIXON: MULTIMEDIA EDITOR**

## WELCOME TO THE DCA CD

**We're keen on making you a better Photoshop artist, and to that end we've got two chapters of video tutorials on the CD. The chapters begin an intensive course of Photoshop learning, and the next eight in the series will be in the next eight issues of *Digital Creative Arts*, so stick with us and collect them all! Also on the packed *DCA* disk is one of the hottest demos around: Premiere Pro 1.5. Much like Adobe Creative Suite, Premiere Pro also has increased integration with apps like After Effects, which is handy if you intend to indulge in some heavy effects work. Turn to page 60 to find out how audio is handled in Premiere Pro. Rounding off the disk we also have the Maya Personal Learning Edition for PC so that you can follow the third and final part of our Maya Masterclass on page 74, and a collection of retouching plug-ins for Photoshop. Let us know what you'd like to see on future editions of the *DCA* CD by dropping us your requests at cdhelp@digitalcreativearts.co.uk**

Hello and welcome to another exciting edition of the Digital Creative Arts CD. We've packed in plenty of goodies so that you can keep abreast of the new developments in the software world, and try out the ones that really interest you.
Topping the bill this issue is the demo of Premiere Pro 1.5. With its new Project Management tools and increased control over your effects with Bezier keyframes, it's both a serious and a thoroughly enjoyable update, and marks the upward trend to professionalism that Adobe is keen to make with the product.
Equally as exciting are the two chapters of Photoshop tutorials that we've got for you from Photoshop-Tutorials-4-You.com. The next eight chapters will be available on the next eight issues of Digital Creative Arts - so make sure you collect them all.
With a collection of retouching plug-ins for Photoshop and the Maya PLE for PC as well, there should be plenty for digital creatives of all disciplines to enjoy. Until next time!
Stuart Dixon
Multimedia Editor
Maya PERSONAL LEARNING EDITION™ This working version of 3D giant Maya is perfect for anyone looking to get into 3D. Please click the 'register now' button during the installation process to receive a 'software key'.
www.alias.com
Adobe Premiere Pro 1.5 Find out what's new in the world of real-time editing with Adobe's pro app
www.adobe.com
Power Retouche
www.powerretouche.com
This pack contains an incredible 155 effects for you to play with
Project Files Click here to open all the resource and project files that are needed to complete the tutorials contained within the magazine. Please look for the 'on the cd' icon in the magazine.
Photoshop Video Tutorials Learn Photoshop with these two chapters – eight more chapters to follow in future DCA issues. Flash player required.
www.photoshop-tutorials-4-you.com
FOCAL BLADE
Whether you want to sharpen or blur, this clever plug-in lets you take control of focus
Click to try this demo
www.thepluginsite.com
PHOTO FREEBIES
Whatever effect you want to apply to your images, this collection has the answer!
Click here
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Digital CreativeArts
MOVIE MAKING • DIGITAL IMAGING • MUSIC CREATION • DVD AUTHORING • 3D DESIGN

### Getting help

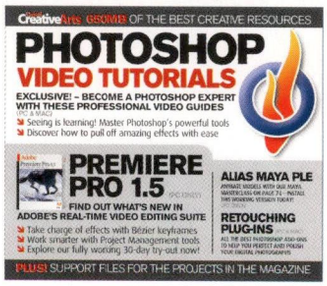
If you ever get in a pickle with the CD, click here for help

### Main categories

Click on one of the white bars to display the CD content in that category

### Using your CD

To use the *Digital Creative Arts* CD, simply place it into the CD-ROM drive on your PC or Mac. If you're using Windows, the CD will run automatically and the above interface will appear. This is where you can access the featured software on the disc, in addition to the project files needed to follow the magazine's workshops. As you run your mouse over an entry, it will highlight. Click to select it. Mac users will find that the interface works differently. Pop the CD into a Mac OS 9 or Mac OS X machine and click on the icon on the desktop. You'll now be able to launch the interface to find and install software. ■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## Look for the logo

**ON THE CD**

*Adobe Photoshop Image used: Sample images/ Contax N Digital/ ContaxND_04.JPG*

**Learn new techniques with our support files**

Along with a host of great software and a super collection of resources, we've also included the files from our workshops so you can follow them through. When you see this logo in the mag you'll know the files are on the CD.

## Experiencing difficulty with your free CD? Don't worry, our multimedia team can help

### GETTING HELP BY EMAIL

*Digital Creative Arts* only provides technical support for using the CD. If you run into any problems you can email our helpdesk team at **cdhelp@digitalcreativearts.co.uk**

### GETTING HELP BY TELEPHONE

*Digital Creative Arts* operates a limited telephone support service. Our CD helpline is open Monday to Friday between 3pm and 5pm only. Call **01202 209339** for assistance.

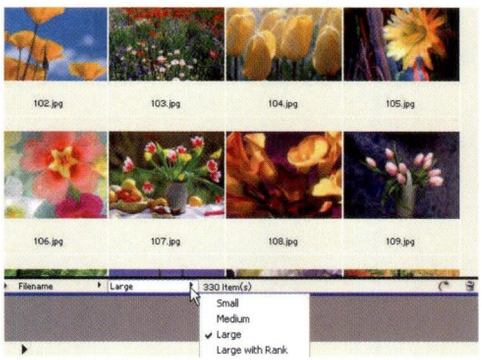
# Photoshop video tutorials

## Starting this issue you can collect 10 video chapters of essential Photoshop know-how – exclusively in Digital Creative Arts

**With two chapters this issue and a chapter per issue for the next eight issues, there'll soon be no excuse not to know Photoshop like the back of your hand.** The company providing this imaging insight is found at **www.photoshop-tutorials-4-you.com**, and also offers video tutorials on programs such as Dreamweaver MX and Flash MX.

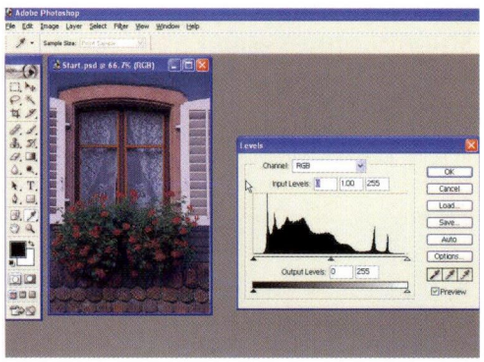
The team behind Photoshop-tutorials-4-you.com was driven to create the tutorials to find the best way to teach a large number of people for a reasonable price. Having paid for a live instructor to teach them in the past, they knew that a video tutorial – where you can go back and forth and revisit tricky bits whenever you want – would be a better and more cost-effective solution. And so the definitive guide to Photoshop was born. Spanning the basics of the interface and getting around an image, the intermediate steps of using tools, filters, and learning to correct photos, the chapters also take the viewer to the high end of the program – where true creativity is possible. Some of the more advanced topics include creating Web rollovers, mastering Liquefy, adding Layer Styles to Custom Shapes and becoming a dab hand with the History Brush. Technical jargon is kept to a minimum, and the explanations are driven by what you can use tools for and what you can achieve.

And if all that wasn't enough, the team is offering an exclusive discount for all those *DCA* readers who'd like to buy the full collection of 16 chapters. Running the entire gamut of Photoshop, you can buy the entire collection of video tutorials for just £21 ($39). To take up this offer, head over to **www.photoshop-tutorials-4-you.com/dca/index.html**.



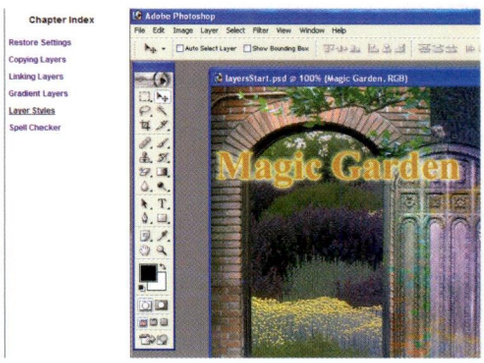

### 1: With this issue

Included on this issue of *DCA* are Chapters One and Two. Chapter One sets the scene for the whole series, and introduces you to the basic way that Photoshop is structured, while Chapter Two reveals the secrets of the File Browser.



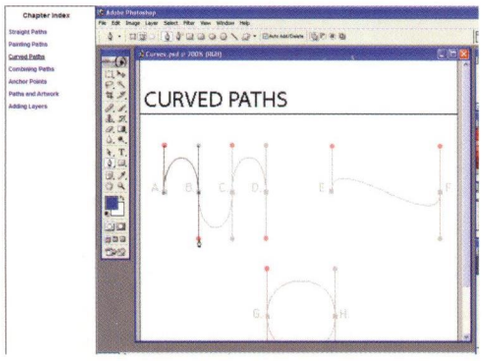

### 2: Learn some tools

In *Digital Creative Arts* 14, we'll bring you Chapter Three. This uncovers the mysteries of the basic retouching, so you can quickly improve any picture. This chapter teaches you about removing colour casts, using the Dodge tool and more.



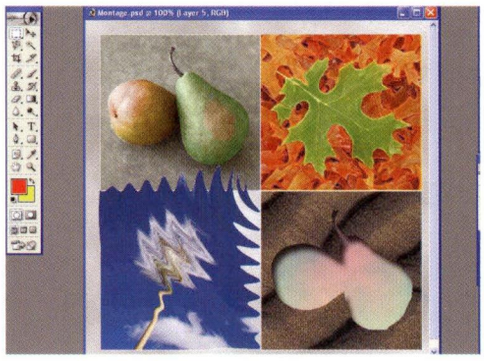

### 3: Demystify layers

Keep on collecting every issue of *Digital Creative Arts* and you'll get to Chapter Five. Particularly useful for those who are Photoshop-ambitious, this chapter will tell you everything you need to know about Layers and a good deal more besides.



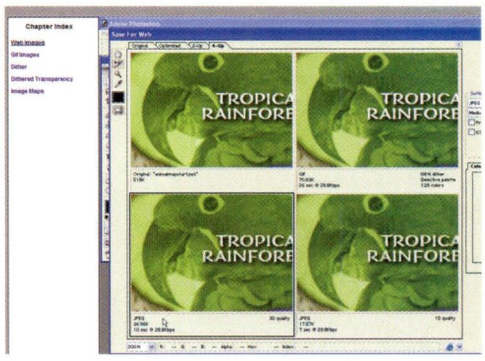

### 4: Pick up a Path

Easy as it is to use the Pen tool, it's incredible how many people don't use it properly, or who don't realise the things it can do. In Chapter Nine, you'll find out about Paths and Points and how you can use the Pen to create amazing shapes.



### 5: Get the lot

Chapter 10 is the last of the 16 available that we'll be including with future issues of *DCA*. To get the full collection, just head to the site using our exclusive Web address. If you do that you'll get Chapter 12, which covers special effects.




### 6: Time to get online

Rounding off the collection, the last few chapters cover using your images for professional purposes. Chapter 14 concentrates on how you can knock your images into shape for the Web, covering optimisation, image maps and lots more.

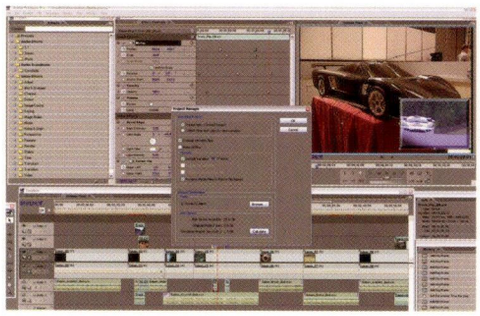
Digital CreativeArtsCD

# On your free CD

## Premiere Pro 1.5

### WITH MORE AND MORE PROFESSIONAL FEATURES, THE ADOBE EDITING APP IS GOING IN FOR THE KILL

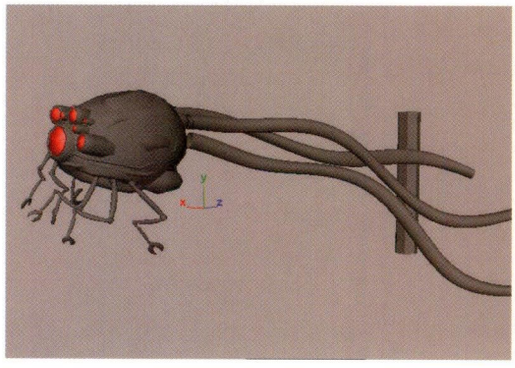
It's the hottest demo around, and we've bagged it for our cover CD. Adobe's Premiere Pro finally gave the desktop editing community something to work with, and this latest update is an even more polished version for you to explore. If you already own Premiere Pro, it's the ideal opportunity to see if the £81.08 upgrade is worth it, but if you're yet to experience the power that this program brings to your desktop then it's definitely time to get stuck in. Get ready to manipulate your media like a true pro...



## Maya 5.0 PLE

### Command the PLE and turn into a 3D master in next to no time

Use the Personal Learning Edition of Maya 5 and you can ease yourself gently into the tricky world of 3D modelling and animation. As a fully working version there's no limit to the amazing animation abilities you can learn. If animation's your game then take a peek at page 74, where we've got the third and final part of our Maya Masterclass, with this part dedicated to giving your models fluid and lifelike movement.



## Retouching plug-ins

### Give your images that glossy, smooth professional perfection

To match this issue's theme of Photoshop perfection, we've included on the CD some of the best plug-ins around for retouching work. They perform a variety of imaging functions, but all come together to allow you to turn your ordinary snaps into incredible images.

## Full index A COMPLETE ROUNDUP OF ALL THE SOFTWARE ON THIS MONTH'S CD

**PC SOFTWARE**
Premiere Pro 1.5
www.adobe.co.uk

Maya 5.0 PLE
www.alias.com

**PC RESOURCES**
Photoshop video tutorials
www.photoshop-tutorials-4-you.com

ColorWasher
www.thepluginsite.com

FocalBlade
www.thepluginsite.com

PhotoFreebies
www.thepluginsite.com

Harry's Filters 3
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Power Retouche
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Power Retouche
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55mm
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Light!
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## CD information

By running this disc it implies that you agree to the following terms and conditions. Please note for the purpose of the statement below the term 'disc' refers to the actual disc itself and all the contents included within the compilation, such as software trials, shareware and freeware software and tutorials. You run this 'disc' at your own risk and in no event will Highbury Entertainment Limited accept liability or be held responsible for any damage, disruption and/or loss to data or computer systems as a result of using this 'disc'. Highbury Entertainment Limited makes every effort to ensure that the 'disc' is delivered to you virus-free, however we strongly recommend that you run a virus checker over the 'disc' before use. We also recommend that you have an up-to-date backup of your hard drive before using this 'disc'. At the time of production, all hyperlinks on the 'disc' direct to the intended destination, we cannot however guarantee that at the time of use these hyperlinks direct to that intended content, and, as we have no control over the content on such sites, we do not accept any liability for content that may appear as a result of visiting these hyperlinks. Some software on this disc may be shareware, which means that if you continue to use the program you should register it with the author. Freeware software can be used free of charge. Trial versions of software are either time-limited (eg limited use of 30 days before becoming unusable) or have some functions/features disabled.

## Loading the CD

**WINDOWS**
We support Windows 98, 2000 and XP unless otherwise stated.

**MINIMUM REQUIREMENTS:**
Screen resolution of 1,024 X 768 or higher.
Preferably with Macromedia Flash Player 5 or higher, Internet Explorer 5.5 or higher installed.
The CD-ROM interface should autorun once entered into your CD Drive, however, if it does not, please follow the instructions below.

1. Double-click 'My Computer'
2. Right-click on your relevant CD drive and select 'Open' from the drop-down list.
3. Read the readme.txt if present to find out which file you need to launch to run the interface. Note this file is normally 'Start.exe', but there may be exceptions.

If you have problems running the interface, all of the contents are available on the disc and can be reached by following the method above and opening the relevant folders (ie Software folder for all of the software).

**MACINTOSH**
We support OS 9 and OS X unless otherwise stated

**MINIMUM REQUIREMENTS:**
Screen resolution of 1,024 X 768 or higher.
Preferably with Macromedia Flash Player 5 or higher, Internet Explorer 5.5 or higher installed.

This CD-ROM interface will NOT autorun when placed into your CD drive. Please follow the instructions below to run this CD.

1. Double-click on the CD icon that will appear on your Desktop.
2. Read the readme file, if present, to find out which file you need to launch to run the interface.

If you have problems running the interface, all of the contents are available on the disc and can be reached by following the method above and opening the relevant folders (ie Software folder for all of the software).

### Missing, faulty or damaged discs

In the event that your CD or DVD has arrived to you faulty or damaged in any way, please contact the address below for a free replacement. Be sure to state the magazine title, issue number and your full name and postal address with any correspondence.

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**Highbury Entertainment Limited**
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**St Peter's Road**
**Bournemouth**
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*Similarly, you can contact this same address if your disc is missing when you purchase the magazine*

# internetcamerasdirect.co.uk

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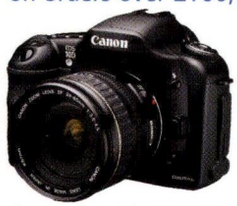
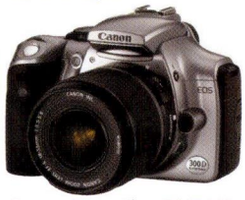


**Canon** PowerShot EOS10D
6.3 megapixels **£1,129**



**Canon** PowerShot EOS300D
6.3 megapixels **£729**

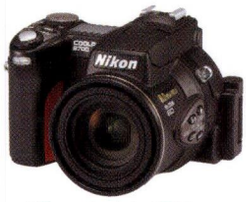
**Pentax** *istD
6.1 megapixels **£1,249**

**Fuji** S2 Pro
6.17 megapixels **£1,049**

**Nikon** D70

- 6.1 megapixels Nikon DX Format CCD
- 7 automated Digital Vari-Program modes
- 5-Area dynamic AF system
- Body only **£799.99**

**Canon** PowerShot Pro1
8.0 megapixels
7x optical zoom **£699**



**Nikon** Coolpix 8700
8.0 megapixels
8x optical zoom **£569**

**Minolta** Dimage A2
8.0 megapixels
7x optical zoom **£599.99**

**Olympus** C8080
8.0 megapixels
5x optical zoom **£599**

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| Canon Digital IXUS 430 | £236.50 | £255.50 | £264.50 |
| Canon Digital IXUS 500 | £279.94 | £298.94 | 307.94 |
| Canon EOS 10D | £1,129.00 | £1,148.00 | £1,157.00 |
| Canon EOS 300D (Body only) | £650.00 | £669.00 | £678.00 |
| Canon EOS 300D | £729.00 | £748.00 | £757.00 |
| Canon Powershot A75 | £163.90 | £182.90 | £191.90 |
| Canon Powershot A80 | £218.00 | £237.00 | £246.00 |
| Canon Powershot A310 | £122.99 | £141.99 | £150.99 |
| Canon Powershot G5 | £375.00 | £394.00 | £403.00 |
| Canon Powershot Pro1 | £699.00 | £718.00 | £727.00 |
| Canon Powershot S1 IS | £345.00 | £364.00 | £373.00 |
| Canon Powershot S60 | £359.00 | £378.00 | £387.00 |
| Casio Exilim EX-M20 | £209.00 | £236.00 | £255.00 |
| Casio Exilim EX-P600 Pro | £425.00 | £452.00 | £471.00 |
| Casio Exilim EX-S20 | £149.00 | £168.00 | £177.00 |
| Casio Exilim EX-Z30 | £213.00 | £240.00 | £259.00 |
| Casio Exilim EX-Z40 | £249.99 | £276.99 | £295.99 |
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| Fuji Finepix A310 | £159.00 | £186.00 | £208.00 |
| Fuji Finepix A330 | £119.99 | £146.99 | £168.99 |
| Fuji Finepix A340 | £153.95 | £180.95 | £202.95 |
| Fuji Finepix F401 'Gold Kit' | £149.00 | £165.00 | £179.00 |
| Fuji Finepix F401 'Platinum Kit' | £199.00 | £215.00 | £229.00 |
| Fuji Finepix F420 | £224.39 | £251.39 | £273.39 |
| Fuji Finepix F610 | £294.98 | £321.98 | £343.98 |
| Fuji Finepix F710 | £299.00 | £326.00 | £348.00 |
| Fuji Finepix S2 Pro | £1,049.00 | £1,068.00 | £1,077.00 |
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| Minolta Dimage A2 | £599.99 | £618.99 | £627.99 |
| Minolta Dimage E323 | £121.00 | £148.00 | £167.00 |
| Minolta Dimage G400 | £164.99 | £191.99 | £210.99 |
| Minolta Dimage G600 | £246.00 | £273.00 | £292.00 |
| Minolta Dimage Xg | £163.99 | £190.99 | £209.99 |
| Minolta Dimage Xt | £179.00 | £206.00 | £225.00 |
| Minolta Dimage Z1 | £189.00 | £221.00 | £241.00 |
| Minolta Dimage Z2 | £247.98 | £274.98 | £293.98 |
| Nikon Coolpix 2200 | £99.00 | £126.00 | £145.00 |
| Nikon Coolpix 3100 | £145.00 | £164.00 | £173.00 |
| Nikon Coolpix 3200 | £159.00 | £186.00 | £205.00 |
| Nikon Coolpix 4200 | £228.00 | £255.00 | £274.00 |
| Nikon Coolpix 5200 | £258.00 | £285.00 | £304.00 |
| Nikon CoolPix 5400 | £379.00 | £398.00 | £407.00 |
| Nikon Coolpix 5700 | £429.00 | £448.00 | £457.00 |
| Nikon Coolpix 8700 | £569.00 | £588.00 | £597.00 |
| Nikon D70 | £949.00 | £968.00 | £977.00 |
| Nikon D100 | £1,279.00 | £1,298.00 | £1,307.00 |
| Olympus C60 | £289.00 | £316.00 | £335.00 |
| Olympus C160 | £99.00 | £115.00 | £129.00 |
| Olympus C310 | £119.00 | £146.00 | £168.00 |
| Olympus C360 | £139.00 | £165.00 | £187.00 |
| Olympus C725 | £174.99. | £190.99 | £204.99 |
| Olympus C765 | £268.00 | £295.00 | £317.00 |
| Olympus C770 | £379.00 | £406.00 | £428.00 |
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| Olympus Mju 300 | £185.00 | £211.00 | £233.00 |
| Olympus Mju 400 | £199.00 | £226.00 | £248.00 |
| Olympus Mju 410 | £206.00 | £232.00 | £254.00 |
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| Pentax Optio 33WR | £189.00 | £221.00 | £241.00 |
| Pentax Optio 43WR | £284.00 | £311.00 | £330.00 |
| Pentax Optio 450 | £314.00 | £341.00 | £360.00 |
| Pentax Optio S | £174.00 | £206.00 | £226.00 |
| Pentax Optio S4i | £279.00 | £311.00 | £331.00 |
| Pentax Optio S30 | £199.00 | £226.00 | £245.00 |
| Pentax Optio S40 | £214.00 | £241.00 | £260.00 |
| Pentax *ist D (Body only) | £1,079.00 | £1,098.00 | £1,107.00 |
| Pentax *ist D (Body & Lens) | £1,249.00 | £1,268.00 | £1,277.00 |
| Pentax *ist D (Body, Lens & Grip) | £1,349.00 | £1,368.00 | £1,377.00 |
| Samsung Digimax 430 | £159.00 | £186.00 | £205.00 |
| Samsung Digimax U-CA3 | £179.00 | £211.00 | £231.00 |
| Sony Cybershot DSC-F717 | £429.00 | £461.00 | £481.00 |
| Sony Cybershot DSC-P8 | £169.00 | £201.00 | £221.00 |
| Sony Cybershot DSC-P10 | £249.00 | £281.00 | £301.00 |
| Sony Cybershot DSC-P43 | £155.00 | £187.00 | £207.00 |
| Sony Cybershot DSC-P73 | £194.00 | £226.00 | £246.00 |
| Sony Cybershot DSC-P93 | £229.00 | £261.00 | £281.00 |
| Sony Cybershot DSC-W1 | £259.00 | £291.00 | £311.00 |
| Sony Cybershot DSC-P100 | £259.00 | £291.00 | £311.00 |

## ACCESSORIES

### SECURE DIGITAL

| | |
|---|---|
| Sandisk 64MB SecureDigital card | 30 |
| Sandisk 128MB SecureDigital card | 50 |
| Sandisk 256MB SecureDigital card | 80 |
| Sandisk 512MB SecureDigital card | 155 |

### COMPACT FLASH

| | |
|---|---|
| Sandisk 64MB CompactFlash card | 22 |
| Sandisk 128MB CompactFlash card | 32 |
| Sandisk 256MB CompactFlash card | 65 |
| Sandisk 512MB CompactFlash card | 115 |
| Sandisk 1GB CompactFlash card | 198 |

### SMARTMEDIA

| | |
|---|---|
| Fuji 64MB SmartMedia card | 19 |
| Lexar 128MB SmartMedia card | 35 |

### XD PICTURE CARDS

| | |
|---|---|
| Fuji 64MB xD picture card | 30 |
| Fuji 128MB xD picture card | 53 |
| Fuji 256MB xD picture card | 129 |
| Fuji 512MB xD picture card | 179 |
| Olympus 64MB xD picture card | 30 |
| Olympus 128MB xD picture card | 52 |
| Olympus 256MB xD picture card | 89 |
| Olympus 512MB xD picture card | 149 |

### MEMORY STICK

| | |
|---|---|
| Fuji 64MB Memory Stick | 32 |
| Fuji 128MB Memory Stick | 52 |
| Fuji 256MB Memory Stick | 89 |

### USB READER/WRITERS

| | |
|---|---|
| Hahnel USB reader/writer for CompactFlash | 16 |
| Hahnel USB reader/writer for SecureDigital/MultiMedia | 16 |
| Hahnel USB reader/writer for xD picture card | 16 |
| Hama USB reader/writer for Memory Stick | 16 |
| Hama USB reader/writer for SmartMedia cards | 16 |

### RECHARGEABLE BATTERIES

| | |
|---|---|
| Hahnel battery charger plus 4 x AA 2000 NiMH rechargeable batteries | 18 |
| Hahnel HSC-104 battery charger plus 4 x AA 2350 NiMH rechargeable batteries | 29 |
| Hahnel set of 4 x AA type 2000 NiMH rechargeable batteries | 14 |
| Hahnel set of 4 x AA type 2350 NiMH rechargeable batteries | 15 |

### PHOTO PRINTERS

| | |
|---|---|
| Canon Bubble Jet i455 printer | 89 |
| Canon Bubble Jet i475D printer | 129 |
| Epson Stylus Photo R300 printer | 129 |
| Kodak EasyShare printer dock 4000 | 179 |
| Kodak EasyShare printer dock 6000 | 179 |

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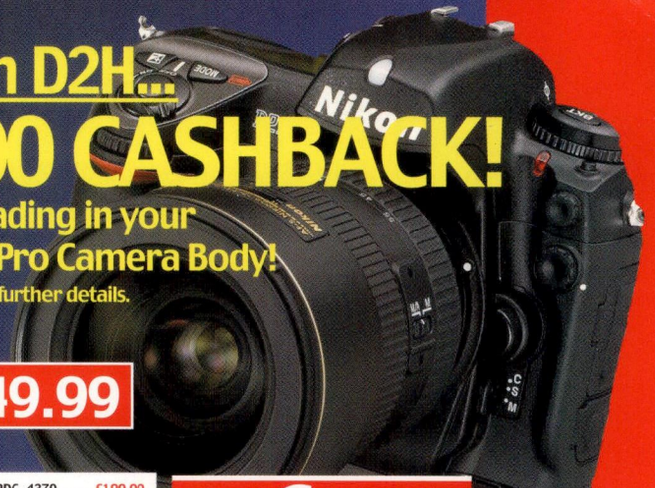


## 4+ m.pixels

| | | | | | |
|---|---|---|---|---|---|
| Canon Ixus i Silver | £229.99 | Leica Digilux 1 | £699.99 | Polaroid PDC-4370 | £199.99 |
| Canon Ixus 430 | £299.99 | Minolta Dimage G400 | £189.99 | Polaroid X530 | £349.99 |
| Casio Exilim Z40 | £329.99 | Nikon Coolpix 4100 | £249.99 | Panasonic Lumix FX5 | £299.99 |
| Casio QV-R41 | £249.99 | Nikon Coolpix 4300 | £249.99 | Panasonic Lumix FZ10 | £399.99 |
| Fuji Finepix A340 NEW! | £179.90 | Nikon Coolpix 4200 | £279.99 | Pentax Optio S40 NEW! | £249.99 |
| Kodak LS743 NEW! | £249.99 | Nikon Coolpix 4500 | £399.99 | Pentax Optio S4i NEW! | £299.99 |
| Kodak DX6490 | £269.99 | Olympus Mju 400 | £249.99 | Pentax Optio 43WR NEW! | £299.99 |
| Konica Revio KD 420Z | £229.99 | Olympus Mju 410 | £279.99 | Pentax Optio MX NEW! | £349.99 |
| Kyocera Finecam SL400R | £299.99 | Olympus C765 NEW! | £329.99 | Samsung Digmax V4 | £249.99 |
| Kyocera Finecam M410R | £379.99 | Olympus C770 NEW! | £499.99 | Sony DSC P43 | £199.99 |
| | | | | Sony DSC P73 | £249.99 |

## 5+ m.pixels

| | | | | | |
|---|---|---|---|---|---|
| Canon IXUS 500 | £369.99 | Nikon Coolpix 5200 | £329.99 | Sony DSC P92 | £269.99 |
| Canon Powershot S60 | £399.99 | Nikon Coolpix 5400 | £449.99 | Sony DSC P93 | £299.99 |
| Contax TVS Digital | £599.99 | Nikon Coolpix 5700 NEW! | £459.99 | Sony DSC P100 | £348.99 |
| Jenoptik JD-5200Z3 | £199.99 | Panasonic DMC-LC1 | £899.99 | Sony DSC P120 | £379.99 |
| Leica Digilux 2 NEW! | £1229.99 | Pentax Optio 555 | £449.99 | Sony DSC T1 | £342.99 |
| Konica KD 500Z | £329.99 | Olympus C5000 | £279.99 | Sony DSC V1 | £349.99 |
| Konica KD 510Z | £399.99 | Olympus C50 | £279.99 | Sony DSC W1 | £348.99 |
| Kyocera Finecam S5R | £349.99 | Olympus C5060 | £459.99 | Sony DSC W12 | £379.99 |
| | | | | Sony MVC CD500 | £469.99 |

## 6+ megapixels

| | |
|---|---|
| Canon Powershot Pro 1 | 8 MPixels.. £849.99 |
| Casio Exilim P600 | 6 MPixels.. £499.99 |
| Fuji Finepix F610 | 6 MPixels.. £299.99 |
| Fuji Finepix S7000 | 6 MPixels.. £399.99 |
| Kodak DX7630 | 6 MPixels.. £299.99 |
| Minolta Dimage G600 | 6 MPixels.. £279.99 |
| Minolta Dimage A2 | 8 MPixels.. £699.99 |
| Nikon Coolpix 8700 | 8 MPixels.. £649.99 |
| Olympus C60 | 6 MPixels.. £349.99 |
| Olympus C8080 | 8 MPixels.. £749.99 |
| Sony DSC F828 | 8 MPixels.. £679.99 |

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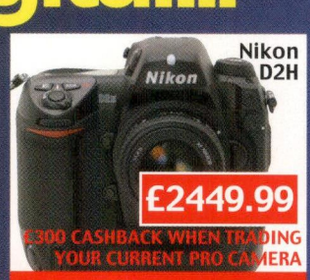


## Canon

| | | |
|---|---|---|
| Canon EOS 300D | 6.0MP | £699.99 |
| Canon EOS 300D inc.18-55mm | 6.0MP | £749.99 |
| Canon EOS 10D | 6.0MP | £1159.99 |
| Canon EOS 1D MK2 | 8.2MP | £3499.99 |
| Canon EOS 1DS | 11MP | £4799.99 |

### Canon accessories

| | | |
|---|---|---|
| Canon Battery BP511 | (300D/10D).. | £54.99 |
| Canon Battery NPE3 | (1D/1DS) | £99.99 |
| Canon Grip BGED1 | (300D) | £149.99 |
| Canon Grip BGED3 | (D60/10D).. | £149.99 |
| Canon Speedlite 550EX.. | | £249.99 |
| Canon Neckstrap | (1D) | £19.99 |

### Canon EF lenses

| | |
|---|---|
| Canon 16-35mm | £1,399.99 |
| Canon 17-40mm | £699.99 |
| Canon 24-70mm | £1,149.99 |
| Canon 70-200mm | £1,499.99 |

## Nikon

| | | |
|---|---|---|
| Nikon D100 | 6.1MP | £1099.99 |
| Nikon D1X Body | 5.4MP | £3499.99 |
| Nikon D1X Pro Kit | 5.4MP | £3575.99 |
| Nikon D70 Body | 6.1MP | £799.99 |
| Nikon D70 +18-70mm | 6.1MP | £999.99 |
| Nikon D70 +28-80mm | 6.1MP | £849.99 |

### Nikon accessories

| | | |
|---|---|---|
| Nikon Battery ENEL3 | (D100) | £49.99 |
| Nikon Battery EN4 | (D1X) | £89.99 |
| Nikon Battery ENEL4 | (D2H) | £PHONE |
| Nikon Grip NBD100 | (D100) | £249.99 |
| Nikon Speedlite SB800. | | £299.99 |
| Nikon WT-1 Transmitter | (D2H) | £249.99 |

### Nikkor lenses

| | |
|---|---|
| Nikkor 18-35mm | £389.99 |
| Nikkor 24-85mm f3.5-4.5 AF-SG | £349.99 |
| Nikkor 17-55mm f2.8 | £1,199.99 |
| Nikkor 80-200mm f2.8 | £1,299.99 |
| Nikkor 200-400mm | £4,999.99 |

## Fujifilm

| | | |
|---|---|---|
| Fuji Finepix S2 Pro | 6.1MP | £1049.99 |
| Fuji S2 Pro+1Gb/batter | 6.1MP | £1199.99 |

### Accessories

| | | |
|---|---|---|
| Fuji SV AC Adapter | (S2) | £29.99 |
| Nikon Speedlite SB800. | (S2) | £299.99 |

### Lenses

| | |
|---|---|
| Nikkor 18-35mm | £389.99 |
| Nikkor 24-85mm f3.5-4.5 AF-SG | £349.99 |
| Nikkor 17-55mm f2.8 | £1,199.99 |

## Olympus

| | | |
|---|---|---|
| Olympus E1 body | 5.0MP | £999.99 |
| Olympus E1 +14-54mm* | 5.0MP | £1399.99 |

### Olympus accessories

| | |
|---|---|
| Olympus Flash FSFL50 | £299.99 |

### Olympus lenses

| | |
|---|---|
| Olympus ED 50mm Macro | £389.99 |
| Olympus ED 50-200mm | £778.99 |
| Olympus ED 300mm | £5,317.99 |

## Pentax

| | | |
|---|---|---|
| Pentax *ist D Body | 6.1MP | £1049.99 |
| Pentax *istD+18-35mm | 6.1MP | £1149.99 |

### Pentax accessories

| | | |
|---|---|---|
| Pentax Grip DBG1 | (*ist D) | £169.99 |

## Sigma

| | | |
|---|---|---|
| Sigma SD-10 Body | 10.2MP | £999.99 |

### Sigma accessories

| | | |
|---|---|---|
| Sigma Power pack | (SD9/10) | £99.99 |
| Sigma Flashgun EF500DG | (SD9/10) | £199.99 |

## Sigma lenses

Sigma EX Lenses - available for Sigma, Canon, Nikon, Fuji, digital SLR's.

| | | |
|---|---|---|
| Sigma 14mm | f2.8 EX | £699.99 |
| Sigma 15mm | f2.8 Fisheye | £379.99 |
| Sigma 20mm | f1.8 EX DG | £269.99 |
| Sigma 24mm | f1.8 EX DG | £229.99 |
| Sigma 28mm | f1.8 EX DG | £179.99 |
| Sigma 12-24mm | f4.5/5.6 EX DG | £519.99 |
| Sigma 15-30mm | f3.5/4.5 EX DG | £429.99 |
| Sigma 17-35mm | f2.8/4 EX DG | £329.99 |
| Sigma 18-50mm | f3.5/5.6 EX DG | £99.99 |
| Sigma 20-40mm | f2.8 EX DG | £399.99 |
| Sigma 24-70mm | f2.8 EX DG | £299.99 |
| Sigma 28-70mm | f2.8 EX DF | £249.99 |
| Sigma 55-200mm | f4/5.6 DC | £129.99 |
| Sigma 70-200mm | f2.8 APO EX | £599.99 |
| Sigma 100-300mm | f4 EX IF | £599.99 |

## Tamron lenses

| | | |
|---|---|---|
| Tamron 17-35mm | f2.8/4 LD (IF) | £299.99 |
| Tamron 28-75mm | f2.8 XR LD (IF) | £399.99 |
| Tamron 180mm | f3.5 Macro DI | £699.99 |

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- COMPACTFLASH
  - Lexar 128mb 12x £20.99
  - Lexar 256mb 12x £49.99
  - Lexar 256mb Pro £59.99
  - Lexar 512mb 12x £99.99
  - Lexar 512mb Pro £109.99
  - Lexar 1Gb Pro £259.99
  - Sandisk 128mb £29.99
  - Sandisk 256 Ultra 2 £56.99
  - Sandisk 512 Ultra 2 £108.99
  - Sandisk 1Gb Ultra 2 £216.99
- IBM MICRODRIVE
  - 1Gb card £149.99
- XD PICTURE CARD
  - Fuji 64mb £24.99
  - Fuji 128mb £39.99
  - Fuji 256mb £84.99
  - Fuji 512mb £139.99
- SMARTMEDIA
  - Fuji 128mb £29.99
- MEMORY STICK
  - Lexar 128mb £49.99
  - Lexar 256mb £89.99
  - Sandisk 256 Duo Pro £69.99
  - S'disk 512 Duo Pro £141.99
  - Sandisk 1Gb Pro £276.99
  - Sony 128mb £59.99
  - Sony 256mb Pro £99.99
- SECURE DIGITAL
  - Lexar 128mb £42.99
  - Lexar 256mb £66.99
  - Lexar 512mb £129.99
  - Sandisk 128mb £39.99
  - Sandisk 256 Ultra £75.99
  - Sandisk 512 Ultra £149.99
  - Sandisk 1Gb £238.99

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- CANON i865, A4 £149.99
- CANON i905D, A4 £249.99
- CANON i965, A4 £249.99
- CANON i990, A4 £287.99
- CANON i9950, A3 £499.99

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  Fax: 01302 327 052
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  Tel: 01482 226 170
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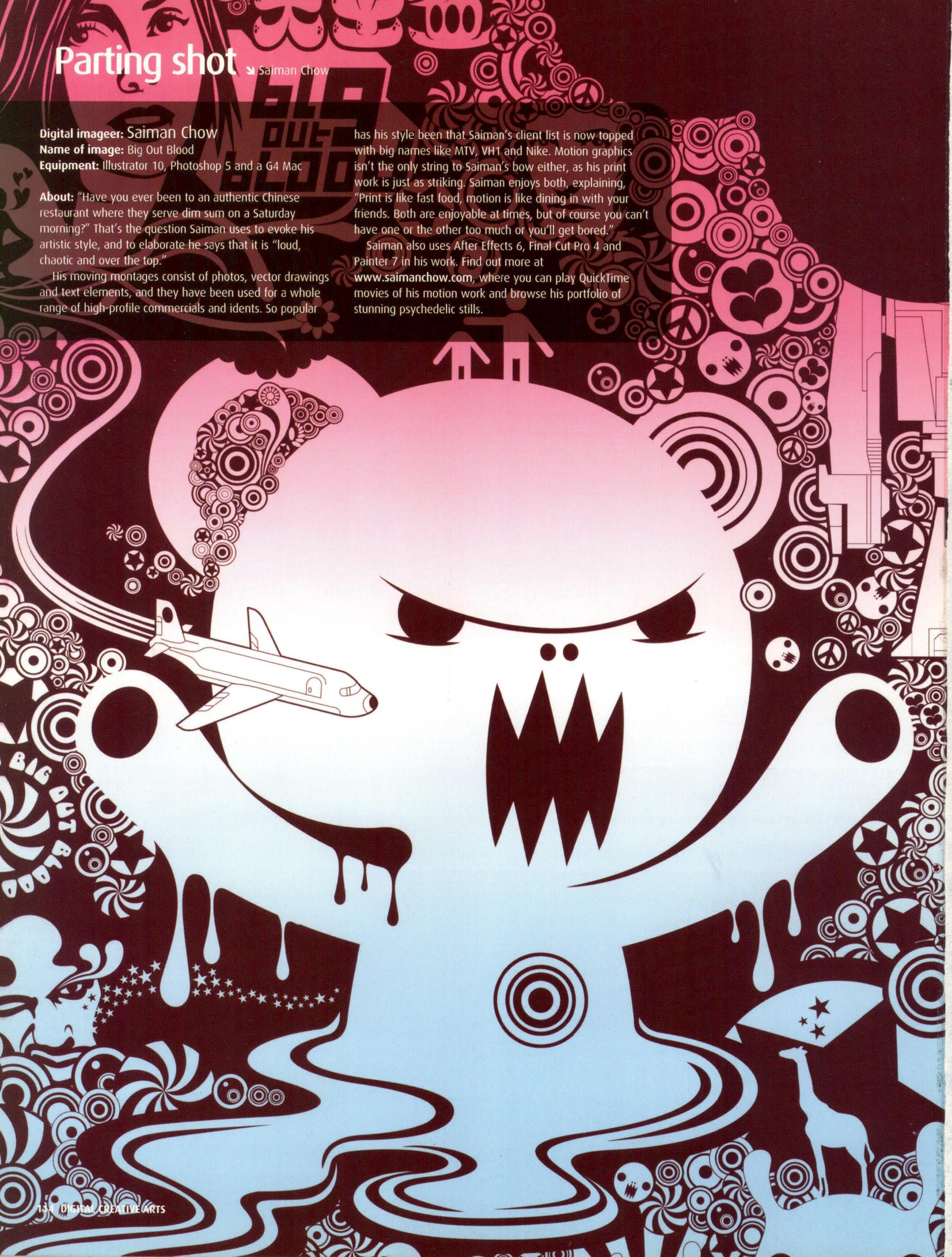
# Parting shot ↘ Saiman Chow




**Digital imageer:** Saiman Chow
**Name of image:** Big Out Blood
**Equipment:** Illustrator 10, Photoshop 5 and a G4 Mac

**About:** "Have you ever been to an authentic Chinese restaurant where they serve dim sum on a Saturday morning?" That's the question Saiman uses to evoke his artistic style, and to elaborate he says that it is "loud, chaotic and over the top."

His moving montages consist of photos, vector drawings and text elements, and they have been used for a whole range of high-profile commercials and idents. So popular has his style been that Saiman's client list is now topped with big names like MTV, VH1 and Nike. Motion graphics isn't the only string to Saiman's bow either, as his print work is just as striking. Saiman enjoys both, explaining, "Print is like fast food, motion is like dining in with your friends. Both are enjoyable at times, but of course you can't have one or the other too much or you'll get bored."

Saiman also uses After Effects 6, Final Cut Pro 4 and Painter 7 in his work. Find out more at **www.saimanchow.com**, where you can play QuickTime movies of his motion work and browse his portfolio of stunning psychedelic stills.

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Apple engineers squeezed all the best features of iPod into a case weighing just 103g and smaller than most mobile phones. iPod mini features an anodised aluminium case that resists stains and scratches. The case weighs practically nothing, but protects iPod mini in your pocket, handbag or backpack. Recessed in the case to keep its surface pristine wherever you lay it, the backlit screen displays full song names and more.

Tunes 4.6 lets you organise your music on your Mac or Windows PC and automatically transfer it to iPod mini. Whether you've ripped your CD collection, bought music from the iTunes Music Store or made your own track with GarageBand, you can take it with you wherever you go. Your iPod mini includes both a FireWire and a USB 2.0 cable for high-speed transfer from your Mac or PC. In fact, you can move an entire album from your computer to your iPod mini in seconds flat.

### iTunes Music Store

The iTunes Music Store features thousands of songs from a massive variety of artists, all ready to download with just one click. Search the entire music store to instantly locate any song by title, artist or album, or browse the entire collection of songs by genre. Listen to a free 30-second high-quality preview of any song in the store, then purchase and download your favourite songs or complete albums in pristine digital quality.

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